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The Meaning and Implementation of Curriculum Integration in the Middle School Years: Ministry of Education Reforms and Current Practice in the Ontario School System

By

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A thesis submitted in conformity with the requirements
of the degree of Doctor of Philosophy
University of Ottawa

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Abstract

While government agencies and numerous education specialists have, for most of this century, tried to promote the use of integrated curricula, the application of this innovation has remained scattered and unfocused. Their lack of agreement concerning its purpose and practicality appears to be a central cause of this problem. With an unclear perception of what this innovation is, many educators find it difficult to implement and resistant to effective and widely-accepted definition and evaluation. The Ontario public school system reflects this problem. The Ministry of Education has directly promoted various forms of curriculum integration in successive stages since 1937. However, each of these initiatives has been followed by a period of retrenchment to disciplinary curricula. A trend emerges from this repeated cycle of advocation, resistance, and then reversal. To many who have implemented this innovation, curriculum integration comes to appear as a worthy endeavour in theory, but inapplicable and unworkable in practice. Nevertheless, its underlying premise, capable of being transferred into a multitude of potential benefits, remains attractive enough that the initiative is repeatedly resurrected.

The objective of this thesis is to develop a more precise representation of the dynamics that affect the process of defining and implementing curriculum integration within the framework of the Ontario school system. This will be represented by an examination of both the perspectives of the Ministry, and of school administrators and teachers. This research will be undertaken through a two-phase study, coordinated through a series of innovation profiles (based on the work of Leithwood & Montgomery, 1987; and Scheirer, 1994), and will focus on the "Middle School Years" (grades 7 & 8).

Dedication

This work is dedicated to the matriarchs of my family – ***Anna Clausen*** and ***Gilberte Byers***. These two grand ladies are polar opposites in both background and personality, one having the patience of Job and the other full of passionate intensity. However, over the years, they have shown me that disparate qualities do much to complement each other. Their teachings have been especially necessary in this undertaking.

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Some of the most important lessons of any educational experience are the unintended ones. For me, I have learned that one person alone cannot accomplish a work of this magnitude. Rather, its completion should be seen as merely the reflection of the help that person has received. In this regard I have been unusually blessed by the people around me. I would first and foremost like to thank my family for their limitless support. My father, Everett Clausen, has reread this tome no less than four times, without complaint. His encouragement and feedback continue to be an unending source of energy and direction for me. The role my mother, Diana Clausen, has played throughout this degree (and in my education in general) also cannot be underestimated. More than any other influence in my life, I can thank her constant inspiration, succour, and hectoring for getting this business completed. Finally, I must tell my sister Britta how much I have appreciated her attempts to keep me from becoming too much of a drudge over these years.

Each member of my thesis committee has made a definitive and distinctive contribution to the development of this work, and for that they deserve high praise indeed:

I reserve first gratitude to Dr. Hanne B. Mawhinney. If not for her strength and guidance at a very critical point in this process, I should probably still be toiling away on an unfinished proposal. Her ability to bring diverse people together and to act as a diplomatic bridge set this initial work in a successful direction.

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Of this group, I have my thesis supervisor, Dr. Brad Cousins, to thank the most. A navigator through some very troubled waters, he never lost sight of the importance of the end goal. He saw the worthiness of my initial ideas for this work, and managed to help me place them into a proper focus with appropriate research methods. His unflappable nature allowed me enough latitude to make this a truly original and idiosyncratic work, while his professionalism grounded me to the standards of the discipline.

I have had many colleagues throughout this journey, and I am grateful for their support. I would especially like to thank my good friend and cohort, Dr. Dale Petruka for lending an ear when I have complained about the process and for joining me in empathy when it was called for.

The bulk of this thesis was written and typed at the offices of CIL/ORION and I would like to thank Andre Gagnon and Joanne Paquette for putting up with my presence over the last two years with good grace and humour (as well as turning a blind eye while I pinched the occasional office supply).

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Introduction

Statement of the Problem

Despite the promotion of curriculum integration by government agencies and numerous education specialists, the application of this innovation has remained scattered and unfocused. A large part of this problem may be due to the vague definitions that have been assigned to the term, resulting in miscommunications between theoreticians, policy makers, and teachers. This study will examine how two levels of the Ontario public school system (the Ministry and the classroom) define the term and explain its applicability. Through a conceptual framework that subdivides "curriculum integration" into various components (such as meaning, form, stakeholder involvement), this thesis will identify the areas where the two levels have accord on the uses of this innovation, and the areas where the two groups simply don't agree. It is hoped that the conclusions of this study could serve as a guidepost for the Ministry in terms of future directions and the applicability of curriculum integration.

Overview of the Thesis

This thesis is divided into several distinct sections in order to aid reading facility. The first section, the ***Review of Literature*** (pp. 3-31), examines work that has been done throughout this century to try to define the term. It also shows where research has fallen short in this area and the need for further investigation. Finally, the review outlines a typology created by recent scholarship that will form the conceptual framework of this study. This is followed by a number of ***Research Questions*** (p. 32), which will guide the work done in this thesis. The second section is dedicated to the ***Methods*** (pp. 33-51) that were used in this dissertation. It discusses why a qualitative approach was chosen, as well as specifics relating to sample, instruments, data collection and analysis for both a study of the Ontario Ministry of Education's perception and a study of Ontario educators' perceptions.

As to be expected, the bulk of this work is taken up by the detailed investigation of these two levels of the Ontario education system. Through an in-depth examination of its curriculum

documents, ***Part I*** (pp. 52-290) seeks to understand how the Department/Ministry has viewed the term. Its relationship with the approach goes back some time, beginning with a rather progressive programmme of studies distributed in 1938. The definition of this era has since changed no less than nine times with each new curriculum issued. Each is deserving of study as it adds to an increased level of understanding of how context has driven the Ministry's changes in definition. They consist of Periods 1 (1938-1942), 2 (1942-1948), 3 (1949-1959), 4 (1960-1966), 5 (1967-1974), 6 (1975-1983), 7 (1984-1991), 8 (1992-1996), and 9 (1997-1999). It is important to note that Part I analysis should be used in conjunction with the explanatory profiles in Appendices A, B and C. ***Part II*** (pp. 291-409) consists of a multiple-site case study of 43 teachers and administrators at 8 schools in Eastern Ontario. This, essentially, completes the picture of the Ontario scene – these teachers' aggregated interview responses to curriculum integration and its uses may be seen as the end result of the Ministry's ongoing promotion of the approach.

The final section in the body of this thesis, ***Conclusion and Discussion*** (pp. 410-452) provides a final summary of the state of curriculum integration in Ontario, and offers implications for further study. This is followed by extensive appendices, which outline the documents employed (Appendix A), the operational definitions, terms and concepts used in this thesis (Appendices B and D), the detailed analysis of Part I (Appendix C), interview guides and dates (Appendices E, F and G) and detailed analysis of Part II (Appendix H).

Not included in the body of this work is a complete transcript of codified quotations from both Department/Ministry documents and participant interviews, consisting of 505 pages. It was deemed prudent by the committee not to include them for general consumption. These remain in a separate volume entitled <u>The meaning and implementation of curriculum integration in the middle school years: Quotations of Department/Ministry documents and participant transcripts</u> and may be made available to readers upon request to the author.

Review of Literature

Curriculum integration has been an issue fraught with numerous difficulties. The two major reasons for its marginalization seem to be the lack of any common operational definitions, and the lack of any wide-scale, multi-site or multi-level empirical research on the subject. This review of the literature will examine these two problems and the attempts that theorists and researchers have made to ameliorate the situation.

Background Issues

Great Promotion but Poor Definition

For the better part of this century, critics have voiced their deep concerns with the disciplinary approach used in most western school systems (i.e., a timetable that revolves around 45-minute blocks of time dedicated to specialized subjects such as science, math and history). They have asserted that such compartmentalism leads students towards a fragmented understanding, an inability to generalize or apply concepts to "real-life" situations, to place artificial limitations on knowledge, and to shy away from team-work and cooperation (e.g., Goodlad, 1984; Haslam, 1986; Hirst, 1974; Kliebard, 1975; Silberman, 1970). For these and other reasons listed below (see pp. 14-21) a diversity of theorists and educators have advocated the use of an integrated curriculum to educate students (e.g., Barnes, 1982; Bruner, 1963; Dressel, 1958; Goodlad, 1958; Jacobs, 1989; Kilpatrick, 1918; Klein, 1990; see also theme issue of Educational Leadership, 1991). Each year hundreds of articles and research papers are dedicated to the promotion of integration.[1] Even with a cursory glance, however, it is apparent that there exists very little agreement between these studies as to the meaning of the term. Under the banner of "curriculum integration", hundreds of definitions endure that include a multitude of

[1] The literature surrounding curriculum integration has risen substantially over the past three decades. In the Educational Resources Information Center (ERIC) catalogue, the keyword "integrated curriculum" displays 1175 documents written between the years 1970-9. This amount of publications stayed stable at 1005 between 1980-9, but has risen to almost triple that amount (2793) for the past decade.

activities, many reflecting opposing epistemological stances of knowledge and understanding. Some researchers link it to student-based learning, others to a very subject-centred approach. Proposals include staff (and therefore cost) reduction, or more intimate student-teacher ratios. Designs range from the tentative sharing of information between distinct disciplines to the wholesale destruction of subject areas, replaced by thematic activities. In short, it seems that the appeal of integration stems from the fact that it may be defined and implemented in so many different ways. However, this broad-based definition has also lead to widespread dissatisfaction. After finishing an article or a study, the reader may be enthused by the author's energy and vivacity, but will have trouble relating the terminology to other studies or his/her own situation. Often, it is abandoned and relegated to the ever-increasing list of the ERIC clearinghouse.

Illustrative of this problem has been a recurrent trend in the public school curriculum of many Canadian provinces. Ten years ago, in British Columbia, for example, the Minister of Education promised certain changes that included an integrated common curriculum, ungraded learning, and a "student-focused" education system (Brummet, 1989; Sullivan, 1988). Immediately, educators expressed great concern and confusion over the vagueness of the terms. But, the program was eventually embraced rather than resisted – even if educators were not sure why. They were hesitant to reject a notion that seemed, on the surface, to be educationally positive because its suggested wholeness and harmony as opposed to disintegration and disunity (Werner, 1991). An educator commenting on the issue displayed the ambiguity of the situation:

> Integration is one of those words whose power lies in its broad emotional appeal ... [and] is often used as if the word were self-evidently good. The word is indicative of a desire in our society to make everything whole, to see the whole child, to reduce the extent to which we divide the world and people into arbitrary parts, none of which add up to a whole. ... To get some sense of the power of the word, try to come up with a positive sounding antonym for integration. The two words that come to my mind are disintegration and segregation, hardly words that I would want to use as emblems for an educational movement. (Fisher, 1990, p.12)

After going through a similar experience, the Ontario Ministry of Education abandoned its attempts to implement an integrated Common Curriculum, referring to it as being too vague and open to wide interpretation. This was replaced with a more disciplinary, clear-cut and hierarchical model (see context - Period 9, Part I for more indepth treatment of this example).

This lack of definition has been a persistent problem for anyone attempting to apply the approach in a practical situation. It initially sounds like a panacea, but inevitably must be abandoned due to the resulting ambiguity. The Scottish educational critic, W. Kenneth Richmond aptly described the term "curriculum integration", when practically applied, as suffering "from a wooliness" of definition which renders it ineffectual (1975). The analytic philosopher Richard Pring (1973) went even further by suggesting that terms such as "integrated studies", "integrated curriculum", "unified knowledge", and "broad fields of experience" were confusing and misleading concepts, possessing no inherent value. More recent scholarship has stressed the importance of rigorously defining and bounding any attempts at curriculum integration in a systematic and conscious effort (Alleman & Brophy, 1991; Hoachlander, 1999; Kain, 1993; Relan and Kimpston, 1991). The lack of a consistent interpretation regarding integration, therefore, presents the first dilemma to any widespread recognition of its form or uses. With an unclear perception of what this innovation is, many educators remain reticent about any wide-scale implementation - to these people it remains a worthy endeavour in theory, but inapplicable and unworkable in practice (Klein, 1990).

Research in Isolated Pockets

Another issue that dissociates curriculum integration from practical use is the type of research being performed. To date, most related literature falls into two categories – Theoretical Research and Action Research.[2] Basing their treatises on previous theories, the first group of

[2] Some researchers do span these two levels (i.e. a great deal of Language Across the Curriculum literature has managed to do this – see below). However, this phenomenon is rare.

authors appears to touch on every avenue that curriculum integration may possibly take. Many delve into the epistemological groundings of the interdisciplinary approach (Bernstein, 1971; Betts, 1983; Dressel, 1958; Hirst, 1974; Jacobs & Borland, 1986; Gass & Duguet, 1972) while others try to combine various disciplines into multitudes of combinations and permutations (Conklin, 1966; Connelly, 1954; Williams, 1976; Sherif & Sherif, 1969; Craig, 1987). Several educational specialists propose theoretical blueprints for how an integrated curriculum *should* be installed (Barnes, 1982; Boyce, 1992; Fogerty, 1995; Grady, 1994; Humphreys, 1981; Mathison & Mason, 1995; McConney, 1994; White, 1981).[3]

The general isolation of scholars when discussing curriculum integration seems to do much to ghettoize the research. Few of these studies seek hard empirical data or broadly-grounded interpretive results to demonstrate or support their assertions. Their arguments are based almost entirely on theory alone. Too many debates between these theoreticians evince a distinct potential for turning into nothing more than a self-perpetuating cycle of theory and critique (this problem formed the basis of a tri-university conference held in Victoria a decade ago - see Coombs, 1991; Case, 1991; and Daniels, 1991). The vast majority of theoretical works, therefore, never receive concrete analysis as to their validity or theoretical rigour, let alone their applicability.

The second type of curriculum integration study appears to come from a more grassroots, "Action Research" level, looking at solitary experiments in integration. Andy Hargreaves, perhaps a tad cruelly, delegitimizes this type of study on the grounds of internal bias: "Most common are descriptive accounts of particular initiatives in curriculum integration often by the people responsible for the development, and presumably, therefore, also for the success or failure

[3] It should be noted that the authors cited here can be interchanged with a myriad of others in every decade of the latter half of this century. Between 1989 and 1995 alone, the ERIC digest shows no less than 421 articles and research papers dealing strictly with the theoretical aspect of curriculum integration.

of the initiative" (1993, p.123). It cannot be denied, though, that the lack of a consistent evaluation standard at this level is indeed a detriment to its validity. Within this broad category, reports fluctuate wildly. Some are merely pieces of self-promotion (Hargreaves makes specific reference to a number of especially self-congratulatory works). Other research projects have attempted to be impartial and several have been assisted by university researchers (e.g., Gilbert, 1989; Hannah, Manfredonia & Percivalle, 1989; Hawes, Leopold & Jenkinson, 1988; Mansfield, 1989; Moss, 1991). Sands and Drake (1996) document the extreme difficulty of the Action Research method when developing and implementing collaborative interdisciplinary courses, and the impossibility of generalizability without some outside consultant. Most of these studies must end off with "Try it, it worked for me". Jere Brophy (1991) noted that the problem with this type of conclusion was that it led teachers to a "try and fail, then try again" approach to integration. Thus, it is difficult to find carefully substantiated and convincing evidence to support a wide-scale introduction of interdisciplinary programmes (Field & Lee, 1992).

Ontario and Wide-Scale Research

A number of important and cogent studies have been undertaken in recent years to describe the state of curriculum integration in Ontario. However, this scholarship appears to reflect the segregation that is generally found in this area of research. Many works are concerned primarily with the practitioner level. Hargreaves and Moore (2000), for example, have recently examined the relationship between curriculum integration and classroom relevance in the practices of 29 junior high teachers. In two reports, Horwood (1992, 1994) chose to focus on a particular integrated curriculum package, an outdoor education experiment, implemented in certain high school classrooms. Others works use government policy as the basis for study. Ardra Cole (1993), in a fairly comprehensive report, examined the "Transition Years" initiative put forward by the Ministry of Education. Fitted into the wider thrust of the program in question, the bulk of research on curriculum integration was based on policy study and secondary sources.

On a much wider scale, numerous educational historians such as Fleming (1972), Stamp (1982) and most recently Gidney (1999) have included integration in relation to the greater trends of curriculum development in the Ontario educational system. Their research makes extensive use of policy documents, media sources, and independent reports on certain issues related to education. Finally, a number of very sound works have been produced within the past decade in Ontario that are concerned with integration theories and models (see Drake, 1992; Miller, 1990).

What would seem to be lacking in the research literature are any wide-scale research projects that try to find the linkages of definition made by the various stakeholders in the Ontario educational system.[4] Because it has so rarely been undertaken, an examination of the two ends of the spectrum, the school level and the Ministry level, would be of particular interest.

The Development of a Typology for Curriculum Integration

To combat the problems associated with lack of clarity and generalizability, theoreticians have endeavoured to create definitions and typolgies as to the way the areas of the curriculum relate to one another. This has proceeded from the search for "one best way" to integrate the curriculum to a more constructivist approach of multiple definitions and umbrella terms.

The Definition of Curriculum for this Study

Putting the notion of "integration" aside for a moment, the definition of "curriculum" itself has plagued scholarship for centuries. The term was originally borrowed from the Latin (a course used for chariots), and can today can be seen as a metaphor to describe some course of events in school. The definition cannot be left at this level, however, as it does little to

[4] A noticeable exception to this rule has been recent works dealing with the effects of the Common Curriculum on teacher's integration practices. Miller, Drake, Harris, Hamelin and Molinaro (1997), for example, undertook a multisite, longitudinal case study that successfully observed the linkages between the central Ministry offices and schools. Their conclusion explained that isolated pockets of implementation had developed due to the disappointing connections between the two levels (see also the follow up work of Harris & Drake, 1997).

disentangle the confusion over its meaning. Beane, Toepfer and Alessi (1986) have tried to resolve this lack of focus by grouping earlier definitions into four categories based on certain commonalties. The first would define the term as a product or the actual documents that result from curriculum planning, development or engineering. A second category would see it more as a program – the course of study offered by the school, the students' required courses, electives, after-school activities and athletics. A third category of curriculum definition includes "those which use the term in reference to the learnings that are intended for students" (p. 32). This would refer to knowledge or content, skills, attitudes and behavioural objectives that students are supposed to learn in school. The last category offers the most radical definition of the term. It refers to all the experiences of the learner that are outcomes of the planned situations. This includes not simply the intended transmission of information to the student but also the hidden outcomes that students take away with them. Ultimately, these various definitions range quite widely from abstract to concrete and from school-centred to learner-centred conceptions.

Miller, Drake and Cassie (1990) point out that while certain groups, schools or even Ministries may define and construct the curriculum in a particular way,[5] the researcher must not be limited by this one rigid definition. Rather, it is necessary to take a broader perspective and observe these categories as merely intersecting sub-sections of a larger definition. For the purpose of this study, therefore, these four categories will be kept in mind at all times when analysing the Ministry documents and interviewing the various sites of this study.

Early Attempts at an Ultimate Definition

The earliest predecessor to the term is the Latin "*universitas scientiarum*" (or the "unity of the sciences"), a core belief to the medieval scholar that all ideas, facts, and knowledge could

[5] Rather than the "Product", "Program", "Intended Learning" or "Experiences of the Learner" continuum outlined by Beane et al (1986), Miller et al (1990) define curriculum as falling into three positions – Transmission, Transaction and Transformation.

be organized into one unified body of philosophy. For any student of higher education to be truly learned, it was believed that he must be dedicated to the study of all the branches of knowledge.[6] While many scholars did specialize in one of the seven liberal arts, the historian Paul Goodman (1970) concluded that they treated it like "a little city within a kingdom": the specialist always knew that his first loyalty was to the whole, and his life dedicated to upholding its principle. By the time of the enlightenment, however, many university-based scholars wrote about their worries concerning the fragmentation of this "seamless coat of knowledge". Their fears stemmed from a growing desire on the part of scientistic philosophers to abandon the philosophical and spiritual precepts that formed the foundation of the university system to reconstruct the university based on a hierarchy of particular, value-neutral, empirical theories.

By the nineteenth century, subjects and grade levels in universities and public school systems became increasingly compartmentalized and isolated. Klein (1990) argues that the education system, lured by the successes of the scientific and industrial community, began adapting their methods. To know anything, one had to break it down into its smallest components. For example, at the University level, one could no longer simply be a scholar of Science, but had to specialize in the sub-divisions of physics, or chemistry, or biology, and so on. To many scholars who still upheld the old beliefs, this resulted in narrow-mindedness and a loss of the fundamental purposes of the education process.

In the twentieth century, two very dissimilar groups have fought this tendency towards fragmentation. The first group, the logical-positivists led by Rudolph Carnap and the Vienna School of the 1920s, did much work to try to find a standard morphological definition for integration in a greater attempt to create a unification of all knowledge. Ridding terms of all

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[6] In the medieval university, the curriculum was divided into the seven liberal arts consisting of the *artes triviales* (grammar, rhetoric, and dialectic) and the *artes quadriviales* (arithmetic, geometry, astronomy, and music). There were no further subdivisions.

connotations and inferences, they translated language into a mathematical formulaic process by empirically reducing words, sentences, and syntax to their lowest common denominator: "The simplest method of reducing, in this sense, one concept to another is by definition. If `a' can be defined by `b', `c', ... then obviously `a' is reducible to `b', `c'..." (Carnap, 1936, p. 434). In so doing, the terms and processes became operationalized, and could be objectively ascertained by scientific observation. So confident were they that they began creating an *International Encyclopedia of Unified Science* in the early 1930s. When applied to the curriculum as a whole, however, scholarship reached an impasse. As information and new knowledge grew exponentially every day, it seemed that there was no end in sight. By 1935, the annual meeting of the National Educational Association arrived at the consensus that it would be impossible to actually unify the sciences in totality (Ciccorico, 1970). Any definition of complete unity was, therefore, abandoned in favour of merely describing the "bringing together of curriculum areas". Shortly thereafter, the term unity dropped from vogue to be replaced by the terms "integration" or "integrative".

The Either/Or Code Definition

Working for the Foundation for Integrative Education (founded in 1947), scholars such as Abraham Maslow and Pitirim Sorokin, continued to seek a better, more encompassing definition for the term. Coming out of this tradition, Bernstein (1971) put forward an "either/or" model of educational design. A curriculum *either* followed a "collection code" (characterized by a system of strongly bounded, specialized subjects), *or* an "integrated code" (characterized by a blurring of subject boundaries, subordinated to some relational idea). Used as a standard definition throughout the 1970s by researchers (Gibson, 1971; Musgrove, 1973; Richmond, 1971; Tuckman, 1972), this model was subsequently abandoned after many critics complained that it over-simplified the approach (Becher, 1983; Conkright, 1982; Miller, 1982).

The Continuum Definition

Several models have been created in the last 30 years in an effort to overcome the absolutist either/or situation. At the university level, theorists initially tried to find more subtle subdivisions in curriculum forms, and place them along a continuum from total integration to total specialization. At an OECD-sponsored seminar in 1972, theorists created specific definitions for these components. They were given names such as "multidisciplinary", "pluridisciplinary" and "transdisciplinary" to delineate how far along the "interdisciplinary" scale the practitioner had gone (see Apostel, Berger, Jantsch & Piaget, 1972). A decade ago, Heidi Hayes Jacobs (1989) won great renown for creating a layman's guide to curriculum integration at the elementary level based on these earlier theoretical endeavours. In her book, she began by placing a number of approaches along a plane, each accompanied with examples she had seen in schools. They ranged from disciplinary to multidisciplinary to interdisciplinary to transdisciplinary. The purpose of her book was to take the reader and practitioner from the hamstrung nadir of disciplinary teacher to the liberating peak of integration. Robin Fogarty (1991) has since built on this premise, constructing a continuum of integration forms with ten ever-increasing integration approaches (from fragmented to networked). Her archetype was subsequently approved by the Ministry of Education and adapted for Ontario Schools in its publication, Towards an integrated curriculum (1993).[7] Most recently, Susan Drake has brought many of these authors together in one work, Creating integrated curriculum (1998) to examine the points of contact between their various approaches. Within a constructivist framework, she represents these methods as intersecting subsets of the larger term "integrated curriculum". Drake maintains that each method has varying importance and utility depending on school setting.

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[7] This document will be further examined in Period 8, Part I.

Case's Anatomy of Curricular Integration

The newest approach has abandoned the continuum in favour of a more three-dimensional model. Hargreaves et al. (1996) explain that this was due to the tendency of its predecessor to prescribe rather than describe, destroying "the possibilities for achieving deeper understanding, subtle definition and a less doctrinaire approach. It also understandably alienates most subject teachers" (p. 103). Writing out of the University of British Columbia, the educational theorist Roland Case (1991) argued that the term was difficult to pinpoint simply because researchers were looking for one answer (or variations thereof). Rather, the term should be seen as having a plurality of meanings depending on the circumstances. The answer was not to create "one best way", or to create a lock-step mechanism for reaching integration but to find out what the term means to people in specific instances and why their definitions vary. It is only this way, Case reasoned that researchers would find a more precise judgement about the uses and limitations of the approach.

Like the earlier Vienna group, Case endeavoured to break the term into root components and then rebuild it to reach a clearer understanding on the part of the researcher (he describes this as studying the "anatomy"of the concept). Based on the 5Ws, Case asked certain questions of the term: WHO was involved in the approach and WHERE did it take place? WHAT did this approach look like? WHEN does this approach occur? WHY was integration being used? From these questions he then devised 5 mutually-exclusive "formal components" or dimensions for defining the concept (see figure 0.1 below).

Unlike Carnap's intentions, however, Case did not wish to distill the term into one absolute. Rather, he proposed that this typology should be used merely as a conceptual framework when approaching any research project, theory or site dealing with curriculum integration. In observing it through this lens, all stakeholders will receive a more precise and

complete picture of the term under these circumstances, facilitating discussion, planning and evaluation.

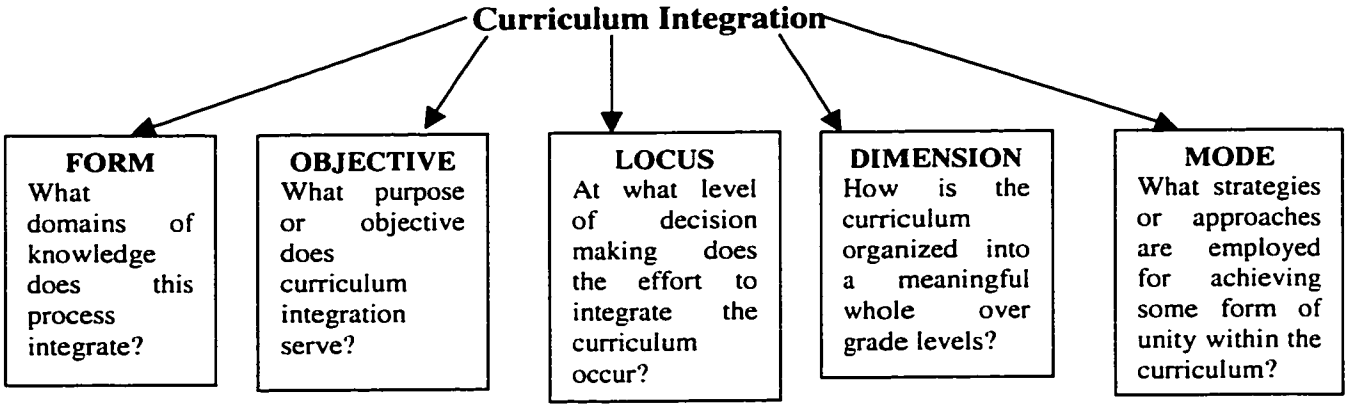

Figure 0.1 – Case's Dimensions supporting his Anatomy of Curricular Integration

The Formal Dimensions of Case's Anatomy of Curricular Integration

What follows is an outline of the various dimensions and sub-dimensions that Case saw resulting from these questions, with a number amendments by contemporary scholarship. Accompanying these are samples of research that have been done in these areas in recent years.

Case's First Dimension (FORMS of integration): What domains of knowledge does this process integrate?

Case (1991) states that the first way an integrated curriculum can be described is by the form it takes. This "form", according to Case, "is determined by the elements, or the discrete parts, within a field which are to be united in some way. ... Thus the elements, which are the discrete features that are the focus of integration efforts, distinguish one form of integration from another" (p. 2). Case names four elements that compose form: The integration of content; the integration of skills/processes; the integration of school and self; and holistic integration. More recent scholarship has offered an even more specific list of elements, six sub-dimensions in all:

Content; Academic Skills; Manual/Practical Skills; Social Skills; Individual Development; and Underlying Principles.

1. Content - Case refers to this as "Propositional Knowledge". Most specifically, content includes the "pieces" of information, dates, names, principles, and so on that teachers and curriculum designers want students to acquire. He describes the integration of content as attempts to draw connections among the understandings promoted within and among different subject areas or disciplines (p. 3). For example, a course on environmental problems might integrate information from a variety of areas including biology, geology, economics, and cultural anthropology. The integration of content areas (especially the search for specific logical connections between disciplines) has been the focus of many inquiries (for example, see Bickley-Green, 1995; Cena and Mitchell, 1998; Short, 1989; Tucker, 1995). As well, some scholars have transcended the disciplines to seek a more "concept-based" form of education (see Erickson, 1998).

2. Academic Skills - Case refers to skills in general as "procedural knowledge" – the methodological strategies and abilities that educators hope to foster. Primarily, skills considered academic include those that would enable a student to progress to higher mental learning, to find information, and learn to learn. Included in this element would be literacy skills, math skills, problem-solving, and research skills. Integration of skills refers to attempts "to integrate these so-called generic skills and processes into the contexts in which they occur" (p. 3). While many studies have been done to examine general problem solving skills (Bannister & Kearns, 1985; Hough & St. Clair, 1995; Nagel, N.G, 1996; Sorenson, Buckmaster, Francis, & Knauf, 1996), and the ability of math skills to transcend its subject (Bailey, 1974; Balzano, 1991; Lee, 1997; Martin,

1996), undoubtedly the most thoroughly researched aspect of this sub-dimension has been "Language Across the Curriculum."[8]

*3. **Manual/Practical Applications*** - This is a sub-section of Case's "skills/processes", while also incorporating aspects of the element "School and Self". Subsequent scholars (Bickley-Green, 1995; Schubert & Melnick, 1997, for example) have determined that Manual skills are those that require a combination of mental processes and physical dexterity, stamina, strength, hand-eye coordination, motor control, and so on. Many of these skills have traditionally found a disciplinary niche in the curriculum, such as manual training, crafts, and physical education. Integration occurs when these skills are transferred to other subjects or contexts to make a link between manual skills and higher level processes so that the student may see the relevance of these skills. An example of this would be the construction of a model in a science class.

Another aspect of this element is practical/vocational application. Case (1991, p. 3) refers to this as part of School and Self. Integration occurs because connections are made between what goes on in school and the students' "outside" world. They are concerned about transferring academic skills and content to real-life contexts. This may entail the inclusion of real life problems in math or describing the vocational possibilities of the social sciences. An immense amount of research has been performed on this area, although it is mostly done in the form of localized school board-district reports (Grubb & Strasz, 1992; Haynes, 1991; Plihal, 1992; Reid & Tsuzuki, 1994; Woodley, 1992), or articles lamenting the fact that a stigma remains between academic and vocational courses (Adelman, 1989; Arnett, 1975; AVA, 1970; Clark, 1992).

*4. **Social Skills*** - This is another sub-section of Case's "Skills/Processes" component. It includes experiences that enhance students' ability to participate in the world around them, and to interact

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[8] Using the keyword "Language Across the Curriculum", there appeared no less than 1769 citations in the ERIC search engine.

with society and peers. This is seen through several facets: The most general is the study of the student's rights and responsibilities as a citizen of Canada and a member of his community. A second would be the student's collaboration in a group project leading to the experience of team-work. Lastly, the student may be put in a situation where he would have to learn about personal interaction - he would have to carry on a conversation, how to cooperate with another person, to compromise to reach a larger goal. Again, integration involves the use of these skills in certain contexts. Examples may include the insertion of a group project around a social studies topic, a debate in a science class, or a one-on-one discussion about a novel in English. Research surrounding group work and citizen training dates back as far as Dewey (1916/1966) and Kilpatrick's (1930) time, and has been thoroughly studied ever since (Hamston, 1996; Korinek & Popp, 1997; Rice, 1994; Sheldon, 1994).

5. Individual Development - This is another aspect of Case's "School and Self" in that there is an integration of what students study in school with students' needs, desires and aspirations. Inserted into the curriculum alongside content and processes are the experiences that promote some form of personal growth. This may include the instilling of confidence, self-awareness, self-interests, and personal goals. It may also include the development of personality, self-discipline, and self-reliance. In short, "Individual Development" includes all the positive traits that the teacher/designer wishes to inculcate in the student. A number of studies have been performed that deal specifically with this issue in the curriculum integration literature (for example, see Bresler, 1996; Sheldon, 1994; Wrobel, 1997).

6. Underlying Principles - This would be included in Case's "Holistic Integration". He refers to this as "all other school-related experiences not expressly identified in the other forms of curricular integration [a fairly broad definition indeed!]. The elements implied in this form of integration include formal and informal practices, routines, methods, rules and other school-based

influences on students' learning" (p. 3). Historically, this form of integration has arisen in the contexts of religious or political indoctrination (Badley, 1986, p. 75). However, in the context of the Ontario school system "Underlying Principles" would include religious, ethical, political, and cultural norms that curriculum designers and teachers (representing the population as a whole) wish to inculcate in students. These agendas may include such principles as progressive ideals, a belief in democracy, multiculturalism, environmentalism, or belief in the benefits of science and technology that may be inserted into the curriculum or policies promoted by the school. This insertion of "Values" into the curriculum continues to play an important part of integration research (see "Fostering Civic Virtue", 1997; Gnanarajah, 1992; Pryor, 1997; Quincy, 1997; Stanley & Nelson, 1986)

Case's Second Dimension (OBJECTIVES of integration): What purpose or objective does curriculum integration serve?

Case lays out a number of objectives for engaging in curriculum integration. However, these do not synchronize well with the rest of his typology. In all other dimensions, he takes pains to argue that the curriculum cannot be seen as content alone. Rather, his "focus extends to both the formal (or planned) curriculum – the intended learning experiences that educators attempt to provide for students – and the informal (or hidden) curriculum – the experiences, both inside and outside the classroom, that determine what students actually learn from schooling" (p. 2). Yet in this one section, he uses curriculum integration and content integration interchangeably. His objectives are clearly dealing with content (as outlined in the previous section). He ignores other possible objectives of curriculum integration. However, Case is not greatly at fault - in defining the term, most authors either obscure or ignore any explicit mention of their motivation for integrating. It was this lapse that, in fact, prompted Pring (1973) to write his devastating critique mentioned above, and has haunted curriculum integration efforts ever since (Werner, 1991).

Generally speaking, authors seem to have followed one of three different paths (which become the sub-dimensions):

1. Subject-centred integration

This is the overarching objective that encases Case's more limited purposes. He identifies four - to address important issues that cannot always be neatly packaged in existing subjects; to develop wider views of their subjects among students; to reflect "the seamless web" of knowledge; and to increase efficiency and reduce redundancy of content. They may be grouped together because they deal with conceptions of subject matter and knowledge. His assertions coincide with many scholars of this century who have expressed a desire to embrace this subject-centred integration as a way of combating an ever-increasing fragmentation of the disciplines and over-specialization in research and teaching. While the more influential scholarship has tended to dwell on this objective at the post-secondary level (Hong, 1956; Hutchins, 1936; 1953; Klein, 1990; Mayhew, 1958; Meiklejohn, 1920; O'Hara, 1938;), it has also been mentioned at the secondary (Broudy, 1954; Kaltsounis, 1990), and middle school levels (Mah, 1994; Sun, 1994).

2. Student-Centred Integration

Beyond subject integration lies an ideal put forward by numerous scholars - that the students should be empowered to take control of their own education. In various manifestations, this objective has been advocated by educational writers and theorists since the mid-eighteenth century, primarily by adherents to Rousseau and Froebel. Most modern curriculum integration specialists today cite the Progressive Education Association as the founder of a coherent platform for child-centred curriculum integration (Darlington-Hammond, 1994; Holt, 1994; Humphreys, Post & Ellis, 1981; Martinello & Cook, 1994; Novak, 1996; Stephens, 1974). Although its publications rarely used the terms "curriculum integration," or "interdisciplinary," the concepts of "wholeness," and "continuity" permeated most of the literature. Recognizing that every human innovation had resulted from curiosity, the Association's founder, John Dewey, felt that the

teacher's task was to motivate children to work co-operatively on these activity-oriented projects, and to link the child's immediate interests with the problems and concerns of the larger world (see Dewey, 1899; Dewey, 1916).

For the rest of this century, most child-centred movements argued for the augmentation of student direction and the reduction of the teacher to a facilitator. This can be in such movements as British informal education (Rogers, 1970; Weber, 1971), the Integrated Day program (Brown & Precious, 1970; Plowden, 1967; Sargent, 1970), Open Education (Barth, 1972; Bremer & Bremer, 1972; Nyquist & Hawes, 1972), and Free Schooling (Graubard, 1972; Novak, 1974; Richmond, 1973). All reasoned that if students were encouraged to choose the direction of their own learning, then pre-ordained instruction in specific disciplines would be contra-indicated. In this case, the subject areas would play a secondary role, being subjugated to the desires and motivations of the students.

3. Political Reasons

Many proposals for integrated curricula revolve around the insertion of some political or ideological doctrine into the classroom. This may include multiculturalism, anti-racism, socialism, environmentalism, or a host of others (see Boyer, 1973; Musgrove, 1973; Quincy, 1997). Bernstein (1971) asserts that when a curriculum contains a certain amount of integration it is attacked by conservative politicians and middle class parents' groups, criticizing integration for lowering standards, destroying `real subjects', and exposing students and teachers to a wishy-washy curriculum of blended subjects. The reform subsequently fails and there is a regression back to more disciplinary forms of education. This is not simply due to the fact that the integrated curriculum was neither well thought out nor perfectly clear in its delivery. It was primarily due to the fact that it had threatened the structures of power and control. Bernstein points out that integration has, therefore, a political and professional objective as well as a philosophical one. This aspect, Hargreaves et al (1996) maintain, is one that is rarely cited by

educational theorists. In fact, it could be argued that a ***fourth sub-dimension*** should be created with the objective of integrating material into the curriculum that promoted the status quo.

It must be acknowledged that the above objectives are not mutually exclusive. Most scholars feel no compunction about citing more than one motivation to promote integration (see Beane, 1992; Daniels, 1992; Lauritzen & Jaeger, 1997; Mansfield, 1989; Maurer, 1995; Roberts & Kellough, 1996). Jacobs (1989), for example, readily combines the first two motivations without seeing any contradiction or polarization. She rationalizes curriculum integration as: a way of fitting in new knowledge that is slipping between the cracks of traditional subjects (subject-centred integration) and a way to empower children to become active learners by allowing them to see the relevance of education (child-centred) (Brandt, 1991, p. 24).

Case's Third Dimension (LOCI of integration) - At what level of decision making does the effort to integrate the curriculum occur?

Case (1991) indicates four levels of decision making where efforts to integrate the curriculum can occur. The different loci of influence and inspiration may effect the extent, character and implementation process of the approach. This dimension has been explored by a number of researchers, albeit most end up discussing relations between various sub-dimensions (see especially the classroom-school levels in Braunger and Hart-Landsberg, 1994; Ross and Olsen, 1993) rather than relating to the system as a whole (this is performed, however, by Walker, 1996). These sub-dimensions consist of:

1. The Ministry Level - In this instance, the decision to integrate the curriculum is undertaken by the curriculum designers themselves. This may be accomplished through a standardized configuration of courses. For example, the curriculum may fuse two previously separate subjects (History and Geography) into one course (Social Studies). Special earmarked funds may also be

made available as an incentive for a school to integrate (i.e., resources and money for an integrated event like a science fair). The Ministry may also take a secondary role by issuing resource documents suggesting that teachers employ certain integration methods within the classroom.

2. The School Board Level - Like the Ministry, boards may rewrite or tighten the curriculum to promote various forms of integration. They may also include a number of resource documents created by consultants that indicate the benefits of the approach. Lastly, they may also earmark resources or funds for special events or school activities.

3. The School Level - The impetus to integrate may come from certain forces within the individual school. The present administration may have a particular bent towards the innovation and promote it among her/his teachers. The staff themselves may set up an informal atmosphere that encourages the use of the approach, or past inhabitants of the school may have set up formal structures (such as an Integrated Studies program) that continue to flourish long after its creators have moved on.

4. The Classroom Level - Lastly, the impetus for integration may come from some inner desire that drives individual teachers to try experiments within their own classes.

Case's Fourth Dimension: (DIMENSIONS of Integration) - How is the curriculum organized into a meaningful whole over grade levels?

Drawing upon the work of Ralph Tyler (1958), Case argues that integration should also be defined over time. "When we examine the relationship between the experiences provided in fourth grade arithmetic and fifth grade arithmetic we are considering the vertical organization" (Tyler, 1958, p. 107). To Case, this is vertical integration - how is the curriculum organized into a meaningful whole over these grade levels? While he only looked at this dimension in the

general sense, there are specifically five various ways that a grade level can be viewed in relation to other grades. These sub-dimensions are:

> **1.** ***Completely Horizontal*** - the curriculum is integrated at one grade level with no continuation or linkages to earlier or later grades.
>
> **2.** ***Downwardly Vertical*** - The level is linked somehow to earlier grade levels through teacher interaction, a shared curriculum, resources or split-level grades.
>
> **3.** ***Upwardly Vertical*** - The level is linked to the secondary system through teacher interaction, a shared curriculum, resources or split-level grades.
>
> **4.** ***Completely Vertical*** - The level is considered as part of a larger, unified system of education. No natural breaks (such as "strictly Junior or Intermediate" levels) are recognized by the relevant stakeholders.
>
> **5.** ***Insular Vertical*** – Two grade levels are linked together as a separate entity (such as the Transition Years). Integration happens between these two grades, but the other levels are ignored.

This relationship may include a specific linking of grades (such as the implementation of an ungraded system) or a more subtle linking through "sphere of influence". David Elkind (1994) notes that elementary teachers, having the advantage of being trained in cross-disciplinary education, may serve as a model for the implementation of integrative education throughout the later school years.

Case's Fifth Dimension (MODES of integration) - What strategies or approaches are employed for achieving some form of unity within the curriculum?

Case modifies the work of Dressel (1958) and Badley (1986) to arrive at four modes or strategies for achieving some form of unity within the curriculum: Fusion; insertion; correlation; and harmonization. However, again Case's components are too broad. Work on this has been done by many other scholars (for example, Drake; Meeth, Jacobs, Klein, Fogarty, OECD) that give more depth to this dimension. While a myriad of names exist for the various sub-forms of the integration approach, they may be logically grouped under the following operational definitions:

***Nested*:** Within a certain subject, the teacher tries to systematically organize curriculum content and parts into a meaningful pattern (Fogarty, 1991).

***Cross-disciplinary Approach*:** Aspects of one discipline are viewed from the perspective of another, such as a course devoted to the history of math (Apostel et al, 1972).

Correlation: As a teacher progresses through one subject, s/he reminds students of content, concepts and ideas that had been previously taught in earlier classes, thereby drawing relevance to a particular point being made (Case, 1991).

***Pluridisciplinary Approach*:** Assuming that certain disciplines are more or less related, they are juxtaposed in a departmental setting. Examples of this include the creation of a social science department with shared resources, under one departmental head, team teaching (Apostel et al, 1972; Jacobs, 1989). Also known as the "Shared approach" (Fogarty, 1991).

Insertion: This refers to the adding of elements of one subject into a larger set, such as the inclusion of a novel into a history course (Case, 1991).

***Multidisciplinary Approach*:** implies drawing connections and noting parallels between subjects as they are taught side by side, i.e., teaching a Shakespeare play in English class as the Elizabethan period is taught in history (Apostel et al, 1972). This is synonymous with Fogarty's "Sequenced Model" (1991, p.62). See also Drake (1998) and Beane (1996).

***Fusion*:** refers to the joining together into a single entity curricular elements that were previously taught separately. An example of this would be the fusing of History and Geography to create Social Studies (as a course, not a department) which in turn could be fused with English to create World Cultures or Society and Self (Case, 1991).

Thematic Approach: Several disciplines develop a problem, issue or theme that can run through the subject areas, and then participate in its delivery (Apostel, 1972). This is synonymous with Fogarty's "Webbed Model" (p. 63). See also Drake (1998).

***Harmonization*:** there is an agreement between subjects that certain skills, concepts that will be taught throughout (Case, 1991). This is synonymous with Fogarty's "Threaded Model" (1991, p. 63-64).

***Transdisciplinary*:** beyond the scope of disciplines - that is to start with the interest of the learner and bring to bear knowledge from the subject areas when needed. However, the disciplinary configuration of the information is unimportant (Apostel et al, 1972, Jacobs, 1989; Lauritzen & Jaeger, 1997; Drake, 1998).

Once all these 5 previous dimensions have been ascertained, Case (1991) states that two parties can now meet and discuss a project with less ambiguity and confusion. Learning the anatomy of the term as it applies to a specific situation, stakeholders can create boundaries. Rather than a panacea, integration will now be seen as fulfilling certain functions, not others. It will have a certain epistemological grounding, a concrete form. As such, Case holds that this typology will do much to facilitate the practical uses for which this approach is capable.

The Implementation of Curriculum Integration

In discussing the ways in which "curriculum integration" can be defined, one aspect cannot be overlooked. The implementation process, in bringing the purely theoretical conceptualization of the term to life, also does much to colour the end definition in the actual school and classroom setting. Hargreaves et al (1996) point to two areas of implementation that must be taken into consideration to understand how the theory of integration behaves at a specific site: potential hindrances to curriculum integration, and potential aids.

Hindrances to Curriculum Integration

The literature on implementation and planned change suggests that when a curriculum innovation such as integration is introduced into a classroom or school atmosphere, a certain number of impediments may arise to block practitioners from effectively implementing the method (Fullan, 1991; Fullan & Hargreaves, 1991; Hargreaves et al., 1993; Lieberman, 1995; Little, 1990; Munn & Morrison, 1984; Olson, 1983; Rudduck, 1991; Skelton, 1990; Siskin, 1994; Tyack & Tobin, 1994; Werner, 1991; Weston, 1979). In terms of curriculum integration, the most likely to hinder the process include:

Subject Attachment - This hindrance to integration, also known as "stickiness", refers to individual teachers' background, training, and self-confidence. Elkind (1994) notes that this

becomes increasingly problematic as teachers rise up the grade levels. Elementary teachers have the advantage of being trained in cross-disciplinary education. They do not need cross-certifications in subject matter, and are unlikely to perceive integration as a threat to their professional identity. However, as most middle and high school teacher education programs require subject specialization (usually a Major previously obtained in the intended field as well as specific training in a faculty of education), teachers may feel uncomfortable about stepping outside of the strict limitations of their discipline. This issue has also been raised by other researchers (Aseltine, 1994; Meier, Cobbs & Nicol, 1998; Perry & Herren, 1998; Robles, 1998; Schumacher, 1992).

Speedy Implementation - Due to governmental deadlines, an innovation may be required to produce results in a very short time (within a year or two of its application). This very factor may significantly harm the implementation of curriculum integration due to the fact that curricular change does not manifest itself overnight. In fact, the true effects are usually evinced only once the student becomes an adult and are rarely completely accepted in less than one generation (this point has been documented by Gibson & Nocente, 1998; Haynes, 1991; Merenbloom, 1996). This factor is especially pertinent in the case of Ontario: a new curriculum integration innovation was launched by the Ministry in 1993 and then halted abruptly in 1996 by the new Conservative Government's mandate to return to back-to-basics teaching.

Work Overload - If too much material or too many steps to finishing a project are delegated to teachers, they express concern that the end result may be a shoddy job, increased problems of bureaucracy and work overload. The even deeper fear is that once the initial implementation period is over, a new layer will just have been added, and efficiency will prove to be an illusion. This perceived problem may lead teachers to fear curriculum integration as a contributor to "burnout" (see Alleman & Brophy, 1991; Mersand, 1969).

Balkanization - If one teacher implements an innovation and others refuse due to subject-attachment or the other reasons outlined above, then that teacher may feel alienated from his/her professional society. This problematic factor, therefore, has the power to cause constriction of implementation for the reason of avoiding ostracism. Fullan and Hargreaves (1991) mention that even in a fairly open atmosphere, without the creation of school-wide collaborative cultures, such as mentor programs, teachers will simply not "work together as a matter of course". Rather than creating unity of the curriculum or reducing overlap, therefore, the innovation may tend to have the opposite effect. This has been further examined by Arnold (1998), Meier, Cobbs and Nichol (1998), Perry and Herren (1998), and Schumacher (1992).

Threat to Teachers' Careers - As well as being ostracized by peers, the innovative teacher may feel threatened by superiors. Werner (1991) discusses instances where teachers were dissuaded by threats of dismissal or transfer based on their attempts to promote curriculum integration within a disciplinary school culture.

Specialized Course Structure - The curriculum issued to the teachers may be so rigidly constructed and the expectations so disparate as to inhibit the ability of the teacher to find connections between different subject areas. Special administrative measures must be taken at the middle and high school levels to ensure that teachers from different subject areas may work together on a common project or there may be severe hindrances (see Arnold, 1998; Cahill, 1993; Munson, 1997; Robles, 1998; Ross and Olsen, 1993).

Traditional Assessment Requirements - A directive to integrate the curriculum without a simultaneous and accepted innovation of testing and evaluation methodology may present a serious obstacle to implementation. Although standardized subject testing has, until recently, been in abeyance for many years in the Province of Ontario, most accepted instruments still tend

to test subject-specific knowledge rather than applied interdisciplinary understanding. The bulk of research to determine the relationship between integrated curricula and standardized tests has been done in the United States (see Field & Lee, 1992 for an overview).

Teaching to Higher Grade level Expectations - University entrance requires completion and evidence of mastery of certain subjects. Therefore, especially at the secondary level, teachers may feel constrained to teach in the traditional disciplinary mode regardless of what recommendations or curriculum forms are issued forth from the Ministry. To do otherwise, they may feel, would deny their students the ability to further their educational goals (see Aseltine, 1994; Meier, Cobbs & Nichol, 1998).

Parental Pressure - Linked closely to Bernstein's (1971) "political motivation", this deals directly with the outside influences on successful implementation of any curriculum integration innovation. If parents refuse to accept that their children can be taught by methods that differ from their own experience, then their opposition may have dramatic effects upon the on-site personnel (studies of this phenomenon have been undertaken by Berman & McLaughlin, 1997; Comer & Haynes, 1992).

Lack of Resources - Teachers may wish to engage in certain integrated activities but are inhibited by the absence of sufficient materials. This may include lack of texts, unit plans, funding for field trips, and so on. The effects of this hindrance have been dramatically shown in numerous studies, including Gibson & Nocente (1998), Perry & Herren (1998), Robles (1998).

Aids in Implementing Curriculum Integration

Research has identified a number of factors that are likely to influence the degree of success of an innovation. Those that appear to be the most relevant to the acceptance of curriculum integration include:

Professional Development and Training - It would appear that an increased amount of professional development (in the form of conferences with principals and curriculum consultants) has a significant impact on teachers' understanding and successful implementation of the innovation (see Fullan, 1992; Huberman and Miles, 1984; Leithwood, Cousins, & Trider, 1990; Little, 1990).

Additional Resources - In mirror-image contrast to the Lack of Resources, additional resources that include forms of curriculum integration (or even more funding for additional projects) enable teachers to succeed in overcoming certain obstacles (Braunger and Hart-Landsberg, 1994; Fullan 1992; Miles and Huberman, 1984; Kovalik and Olsen, 1994).

Parental Support - Studies have made the assertion that an innovative program will be more likely to succeed with the backing and participation of the students' parents (Berman & McLaughlin, 1997; Comer & Haynes, 1992; Fullan 1991; Fullan 1992; Trider, 1985; Leithwood et al., 1990).

Community Support - An extension of parental support, the school can also look to the surrounding community for aid in innovative programs. Principals can give students exposure to professionals and business people by encouraging site-based councils, school-business partnerships, and other social programs. (Braunger and Hart-Landsberg, 1994; Fullan, 1992; Leithwood, Cousins & Trider, 1990).

Support for the innovation from the School Board - This should also be seen as a factor. "The commitment and actions of central office administration are critical to the success of board-wide implementation efforts" (Fullan, 1992, p. 38). See also Cohen and Spillane (1992), Comer and Haynes (1992), Fullan (1992), and Walker (1996).

Support for the innovation from the Principal - Another important factor influencing implementation is the principal's leadership (Fullan, 1992). Berman and McLaughlin (1977) found that projects having the active support of the principal were most likely to fare well. Trider (1985) found that the professional experiences, beliefs and values of the principals influenced the amount of attention and effort a principal gave to the innovation. "Principal's actions serve to legitimate whether a change is to be taken seriously (and not all changes are) and to support teachers both psychologically and with resources (Fullan, 1991, p. 76). See also Backer, Liberman and Keuhnel (1986), Block (1987), Braunger and Hart-Landsberg (1994), Caldwell & Spinks (1992), Daresh & Playko (1992).

Role Model - a champion to help implement the innovation - Walker (1996) puts forward the premise that teachers who choose to integrate will focus their energy on success rather than sabotage. When "the seeds planted by these pioneers are nurtured by administrators, integrative education can grow organically to encompass the system" (Braunger & Hart-Landsberg, 1994). This persistent championship can therefore be seen as a critical factor in implementation (Backer, Liberman & Kuehnel, 1986). The problem with a role model, however, is that once s/he leaves the school, or simply moves on, the innovation no longer has the spark to keep going (Fullan, 1992). See also Little (1990).

Teacher Support for the Innovation - For an innovation to occur, it must have the continued backing of the teaching staff, who perceive that there is a need for it (Fullan, 1991). Teachers must also need to be confident that they have the necessary knowledge, skills and capabilities to carry out the innovation (Leithwood, Cousins, & Trider, 1990). If not, they must feel secure in the knowledge that as a group, the teaching staff can accomplish the new tasks involved with the project. In short, the innovation needs a concerted commitment from the teachers (Darling-Hammond & Ascher, 1992; Kovalik & Olsen, 1994).

Adaptability of the curriculum innovation - The adaptability of a curriculum innovation is important to successful adoption (Backer, Liberman & Keuhnel, 1986; Fullan, 1991). In other words, the innovation needs to fit well with the teacher's situation and school context. Miles and Huberman (1984) discuss three ways an innovation is adaptable: that the innovation relates to the students; that parts of the innovation are already familiar; and that the innovation is consistent with existing beliefs.

Open Policy Creation - Involvement in the creation of the policy appears to aid implementation. Leithwood et al (1987) found that when teachers were involved in the creation of a policy, respondents generally agreed that their "ownership" in the original decisions was an aid to implemention. See also Hallinger, Merphy and Hausman (1991).

Collaboration in the School Environment (especially from the students) - The innovation will be more successful and more readily accepted by all stakeholders if their collaboration has been solicited. Students will be especially more receptive to a project whose creation and execution they had aided (Cox & De Frees, 1991; Dalin, 1996, 1998).

Overview and Research Questions

Several gaps emerge in our knowledge of curriculum integration and its related activities. First, considerable dispute appears prevalent regarding the forms and rationales of curriculum integration. Educational scholars have quite broadly defined both, but little distinction or categorization of these two defining characteristics has been performed. Second, while certain fairly solid theories about what it *should* look like have been proposed, they have been underutilized (Case's typology is a prime example – it has yet to be tested). At the same time,

relatively little study has been made of actual practice in integrating the curriculum beyond the case study. There is an especial lack of research done that links theoretical propositions (such as governmental directives) with the perspectives of solitary practitioners. A study of curriculum integration practices within an entire system, such as the Ontario public education system, may prove to be timely and insightful. Third, should a discrepancy exist between Ministry policy over time and governments and actual practice in Ontario schools, it seems that the underlying causes of this divergence deserve analysis.

The purpose of this research, therefore, is to reach a clearer definition of the term "curriculum integration" in a particular setting. It is to examine and explain where consensus exists between the stakeholders and where no common bonds have been formed. It is the belief of this research that future uses and applications of this method can only be addressed once some common accord has been established among those people who are engaged in it. Otherwise, communication between the various levels of an educational system will be relegated to vague statements, misunderstandings and the misuse of this approach.

The proposed research hopes to address these above issues through answering the following research questions:

1. What has curriculum integration meant to the Ontario Ministry of Education from 1937 to the present? How has this conception varied over time? What factors explain such changes?

2. What does curriculum integration mean to contemporary school administrators and teachers of the intermediate level (Grades 7-8)?

3. How do these two perspectives compare to each other? What factors and/or conditions explain their alignment?

Methods

The present study is one that seeks meaning and interpretation of a distinct geographical and cultural area rather than one that seeks generalizability. For this purpose, a qualitative research methodology was chosen as the most fruitful for eliciting responses. More specifically, the case study approach appeared to be the best-fit method for this thesis' objective:

> Rather than using large samples and following a rigid protocol to examine a limited number of variables, case study methods involve an in-depth, longitudinal examination of a single instance or event. It is a systematic way of looking at what is happening, collecting data, analyzing information, and reporting the results. The product is a sharpened understanding of why the instance happened as it did, and what might be important to look at more extensively in future research. Thus, case studies are especially well suited toward generating, rather than testing, hypotheses. (Davey, 1991)

The results of this thesis were generated from two case studies. The first examined a governmental body, the Ministry of Education for Ontario. It was a longitudinal study, in that it collected information at different points of time in order to examine changes over these periods. The second case study was cross-sectional in that it explored eight schools over one geographical area in a short period of time. Ultimately, these two studies did much to compliment each other. Ontario educational society is presently made up of several levels of decision–making and activity. In a descending order this hierarchy includes the Ministry, school boards, schools (each with a principal and staff), and classroom (this is, at least according to Fleming, 1972). These two case studies may, therefore, be seen as two interlocking pieces of a puzzle. They show both the theoretical (Ministry) perspective and practical (classroom) perspective of curriculum integration.

While this research study was done through the use of historical and qualitative data, it must be stressed that the methods employed cannot be termed as traditionally historical or qualitative research. Strictly inductive methods were not used in this study. Rather, as

recommended by Miles and Huberman (1994), a conceptual framework based on existing literature (see pp. 13-30) was predetermined before the study began. Themes and issues did not solely arise from spontaneous conversation and events (although they did occur). Instead, a bulk of the data took the form of answers to pre-constructed research questions. Instrumentation was also constructed before the two phases of this study began rather than letting it emerge from the research. Again, Miles and Huberman's (1994) arguments for the use of a lot of prior instrumentation were quite pertinent in this situation. First, they state that "if you know what you are after, there is no reason not to plan in advance how to collect the information" (p. 35). In searching out a situational definition, this was indeed the case. Second, they observe that:

> If interview schedules or observation schedules are not focused, too much superfluous information will be collected. An overload of data will compromise the efficiency and power of the analysis. (p. 35)

As pertaining to this point, there was a double worry in this research project. The documents of phase I and the interviews of phase II, without some guidance, could stray into many unintended areas and extremely long descriptions. As most interviews were of only a 45-minute duration, any wild divergences could have been disastrous without some guidance.

Lastly, Miles and Huberman (1994) argue that:

> Using the same instruments as in prior studies is the only way we can converse across studies. Otherwise the work will be noncomparable, except in a very global way. We need common instruments to build theory, to improve explanations or predictions, and to make recommendations about practice. (p. 35)

A universal instrument was, therefore, necessary in enabling a discussion between the various periods of history of phase I and participants in phase II. Any conclusions reached were largely based on the ability to relate the mass of grounded information in both phases.

The remainder of this chapter will relay how this research project was undertaken. It will examine the specific nature of the sample, instruments that were used, procedure and analysis.

Phase 1 - The Ministry's Profiles of Curriculum Integration

Directed by the first research question and the conceptual framework described in the Review of Literature, this phase examines documents that explain the Ministry's definition of the term *curriculum integration*, and the role it sees itself playing in the promotion and implementation of such an innovation.

Sample

Because the Ministry's view on this subject has varied dramatically over time, an ideal taken from the examination of a single document or Ministry official would have been too narrow in perspective (according to Schwandt, 1997). Alternatively, an exhaustive search of all Ministry documents, past and present, would prove to be too time-consuming and monumental in scope. I had originally desired to pursue the more traditional historical approach of amassing all possible "thick data" (Geertz, 1973). While committee members had warned me against this during the early stages of the proposal, I conducted a preliminary search of material at the Archives of Ontario, the depository of all Department/Ministry material (1938-1970). There I found the existence of thousands of memos, memoirs, official and unofficial studies, fact-finding reports and a myriad of other related documents. Outside of their dates of distribution, all documents were stored in a relatively uncategorized state. Conceding defeat at this point, I realized that my study had to be bound one way or another to bring some control to the collection of data. The first approach could have been to confine the study to a certain era of history (1938-1949, for example). If I had decided to do this, I would have continued this study as a true piece of historical research. However, I would also have to abandon my main desire to find definitional linkages over time in relation to the present situation in Ontario.

Instead, I decided that the best way to proceed was to limit the type of documents under study. I focused solely on the programmes of study (curriculum guidelines) and course requirements (i.e., *Curriculum I:1, OS:IS)* that the Department (and subsequently the Ministry)

has issued since 1937[1] concerning the grade levels 7 and 8. These specific policy documents were chosen for two reason: First, it was felt that these guidelines would most accurately reflect the Ministry's perspective of curricular concepts and issues; Second, it was felt that while internal memos, resource papers and other internal documents may give additional insight into the workings of the Ministry, it was the guidelines that would relate its' official policy.

Data Collection and Trustworthiness of the Data

The specific documents that form the basis of study for Phase 1 are named in Appendix A. Each document is accompanied by its individual quotation codes (explained below) and corresponding page numbers. One of the benefits that I assumed would be derived from studying published curriculum material would be the ease with which I could obtain access to reading them. For many of the guidelines listed in the appendix, however, this did not prove the case.

I began my search for these documents by acquiring the authorized programme of studies that was presently in place, the Common Curriculum (I began this search in 1996). I downloaded the entire document from the Ministry of Education and Training's official website and printed a copy. In the sections that mentioned curriculum integration, it made acknowledgements to the Hall-Dennis Report of 1968 for promoting this approach as well. At first, I thought I had found the root of curriculum integration in Ontario curriculum policy and planned to begin my study in the 1960s. However, upon reading the report, I noticed that they, in turn acknowledged an earlier programme of studies, issued in 1937, for its innovative child-centred form of curriculum integration. I then researched this particular programme through secondary sources (primarily Fleming, Stamp and Fiorino) who all agreed that it was a fairly important document in promoting curriculum integration and stood in stark contrast from all previous elementary guidelines. I then made the decision to trace the Ministry's view of curriculum integration back to this document.

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[1] This date was chosen because it was the first year that the Department of Education initiated what would be considered an "integrated" curriculum policy (see Period 1, Part I).

To find all authorized curricula from 1938 to present day, I referred to the Minister of Education's Annual Report. It contained a short synopsis of the advances that the Minister had felt had been accomplished for that year, as well as a list of all authorized guidelines distributed to the Ontario education system. From this I compiled a list of documents that are presently displayed in Appendix A. To obtain the actual texts, I began from 1996 and worked backwards. I started with the peripheral documents to the Common Curriculum and continued to amass all the OSIS material located at the University of Ottawa library. Unfortunately, the university did not have documents before 1980. I searched the university library system and found that McGill had a complete collection of Ontario curriculum documents from 1965 to 1980 on microfiche. Material before 1965, however, was impossible to find in Eastern Ontario. Through an internet search, I was able to confirm that the Ontario Institute for the Study of Education (OISE) had one copy of all the earlier programmes of study.

Making the trip to Toronto, I first found a bound copy of the 1942 Programme of Studies on the reference shelf at the Robarts Library at the University of Toronto. Unfortunately, the remaining material (documents 1A, 2B, 3A-3D, 4A-4F) were kept in a special collection at OISE's Jackson library. The room in which this collection was maintained was open at odd hours a few days of the week, and I was escorted to it only on the third day of my visit to Toronto. I was not permitted to make any on-the-spot photocopies of the documents, or bring any writing material in the room save an HB pencil. It was immediately apparent that the public had not looked at these guidelines in some time. One of the librarians had, in fact, pushed a desk up against the bookshelf in which they were contained. The piece of furniture being too heavy to move, I could only reach the material by crawling under or around it. After finding all remaining documents, I placed a request for photocopying to the librarian who was assigned this task. After a great deal of debate, she agreed to photocopy 1A, 2B and 3A-3D in its entirety (as they were approximately fifty years old). However, she refused to photocopy any more than 10 percent of

documents 4A-4F, fearing repercussion for breaking some publishing law. In the end, I wound up transcribing the pertinent parts of these documents by hand. The photocopies took two weeks to complete and awaited my return (I returned for them two months later).

I read all documents through once to familiarize myself with the use of language, the general objectives and methods that the Ministry desired to put forward to the teaching community. I then returned to programme 1A and conducted an extremely close read of the text. I circled the areas that pertained to curriculum and crossed out all areas that did not (such as teachers' duties in cleaning the school, procedures during fire drills, etc). I then transcribed the circled areas into Word format to be ready for data analysis (see below). This procedure was then performed for all the remaining documents (2A-8D). By the time I had read and transcribed the eighth period, the newly installed Conservative government had begun to distribute the latest set of curriculum guidelines (9A, 9B, 9H in 1997, then 9C, 9D, 9E, 9F, and 9G in 1998). It was to my great relief that the guidelines from the last two periods were kept on the Ministry's website as either Adobe or HTML files. This greatly sped up the transcription process. In total, this process took six months of fairly full-time labour.

Instruments for Phase I

Two instruments were created to examine these documents and to obtain some meaning as to the Ministry's definition of the term. Displayed in Appendices E and F, the first instrument took the form of a guide with questions derived from Case's modified typology (see pp. 13-31). The second instrument (whose use is shown in Appendix C) was created to judge and calculate the level of importance that the Ministry has placed on Case's dimensions. In order to do this most accurately, the concepts of "innovation profiles" (Leithwood & Montgomery, 1987) and of "process evaluation" (Scheirer, 1994) were taken as models. Two multi-dimensional profiles were constructed for this study - one that dealt with the definition of the term "curriculum

integration" and a second that examined the implementation of this approach. The method was chosen as the best means of creating some uniformity across the phases and thereby allowing possible comparisons. Scheirer (1994) explains that how a program (or in the present case, curriculum) is defined will effect the evaluation of its delivery or implementation. In other words, without a clear theoretical framework that delineates the dimensions of the program, on-site evaluations "risk assessing non-events or activities very different from those intended by program developers" (p. 42). Therefore, as Scheirer insists, "a full description of program components [again, this thesis takes this to mean "curriculum components"] is the foundation for assessing program delivery" (p. 45). To create the first profile, therefore, Case's dimensions were placed in a matrix formation and graded as to importance (see figures 0.2 to 0.6 below, and Appendix B for decision rules concerning priority levels).

	Content	**Academic skills**	**Manual/Practical Skills**	**Social Skills**	**Individual Development**	**Underlying Principles**
High Priority						
Medium Priority						
Low Priority						
Negligible Priority						

Figure 0.2 – A blank matrix representing Profile 1 - Dimension A "Elements Used During Integration"

	To promote the unity of the Curriculum (Subject Centred)	**To promote a student-centred curriculum**	**To promote social continuity**	**To promote a political change**
High Priority				
Medium Priority				
Low Priority				
Negligible Priority				

Figure 0.3 – A blank matrix representing Profile 1 - Dimension B "Objectives of Integration"

	Ministry	Board	School	Classroom
High Priority				
Medium Priority				
Low Priority				
Negligible Priority				

Figure 0.4 – A blank matrix representing Profile 1 – Dimension C "Loci of Integration"

	Completely Horizontal (integration among subjects but separated by Grades 7 & 8)	Downwardly Vertical (Grades 7 & 8 linked to the Elementary system)	Upwardly Vertical (Grade 7 & 8 linked to the Secondary System)	Completely Vertical (Grade 7 & 8 seen as part of complete education with no breaks)	Insular vertical (Grade 7 & 8 linked but seen as a separate entity from elementary & Secondary)
High Priority					
Medium Priority					
Low Priority					
Negligible Priority					

Figure 0.5 – A blank matrix representing Profile 1 – Dimension D "The Relationship of Grades 7-8 to the Other Grade Levels"

The final dimension in Profile 1, "Integration Methods/Approaches" will be displayed in more detail. After sampling the documents, it was noted that the methods appeared to change somewhat depending on the course guideline. The matrix (shown below in figure 0.6) was then edited to show individual subject areas, as well as the sub-dimension. Priority level was displayed by a shading scheme (explained in Appendix B).

	Nested	Cross	Multi	Correlation	Pluri	Insertion	Fusion	Thematic	Harmonization	Trans
Preamble										
Social Studies										
English										
Math										
Science										
Health										
Music										
Art										
Craft										
Home Economics										
Agriculture										
Religion										

Figure 0.6 – A blank matrix representing Profile 1 – Dimension E "The Integration Methods/Approaches Used"

The second profile, consisting of two dimensions, was created based on the planned change literature outlined earlier (pp. 24-30). This is displayed below (figures 0.7 and 0.8).

	Teacher –Related					Curriculum –Related			Outside Forces	
	Subject Attachment	Speedy Implement	Work Overload	Balkan-ization	Threat to careers	Specialized Course Structure	Traditional Testing	Influence of Secondary Education	Parental/ Community Pressure	Lack of Proper Resources
High Degree of Awareness										
Fair Degree of Awareness										
Vague Evidence of Awareness										
No Evidence of Awareness										

Figure 0.7 - A blank matrix representing Profile 2 – Dimension F "Awareness of Implementation Impediments"

	Prof. Dev.	Add'l Resource	Parental Support	Community Support	Board Support	Principal Support	Role Model	Teacher Support	Adapt ability	Open Policy Creation	Student Involve ment
Actively Provides											
Actively Encourages											
Passively Encourages											
No Evidence											

Figure 0.8 - A blank matrix representing Profile 2 – Dimension G "Aids to Implementation"

Analysis of the Data

The Guidelines

The collected and transcribed excerpts from the guidelines were grouped into a number of historical periods based on changes in courses of study, curriculum integration and its implementation mentioned in the Minister of Education's Annual Report. As stated in the data collection section, these sources are outlined in Appendix A and more precise reasons for the category decisions are explained throughout Part I of this study (see especially the context sections). This information was then coded based on Period, Document, and excerpt from the document (usually between one sentence to one paragraph per excerpt). As shown below, for

example, code **2A-3** would represent the third excerpt from document A in the second historical period (1942-1948). These coded data were then transferred to the innovation profiles (one profile for each period), based on their matches to the specifications found in Case's modified typology. An example of a typical subdimension of this profile is shown below in figure 0.9

Social Skills
2A-3 – Education for Social Living: Educators accordingly attach great importance to the development and exercise of those qualities that enable the individual `to work with other people,' `to get along with others,' `to act in a socially acceptable manner,' `to develop a socially satisfactory personality,' `to be a good citizen.' ... Such standards do in fact exist; and in our society, they derive from the ethics of the Christian religion and the principles of democratic living. It is, therefore, a major concern of the school that the children entrusted to its care shall learn to live in a manner that is socially effective in a democratic society, which bases its way of life upon the Christian ideal. (p. 5)
2A-4 The teacher must be clear in his own mind about the qualities of the person who will play his part satisfactorily in such a society, and about the way in which the school should proceed in order that the "socially satisfactory personality" may grow. The person "who gets along with others" is courteous and pleasant in manner. He abides by the decisions of the majority. He has respect for the opinions, the privileges and the property of others. But it is not enough for him to be agreeable and to refrain from infringing upon the rights of his neighbors. The socially satisfactory person must refer his way of acting to what the others are doing, and make it fit in. That is to say, he is cooperative in his attitude, and by his cooperation he contributes in a positive manner to the welfare of the group. In order to make a positive contribution he must have ideas, be able to make them known, and be able to carry them out. Cooperation in a democratic group requires self-control, intelligent self-direction, and the ability to accept responsibility (p. 5-6)
2A-12 Nor has any attempt been made to outline the teaching of citizenship in a democracy as a subject. The schools of Ontario exist for the education of democratic citizens. To this end, reliance must be placed upon the principals and teachers to train their pupils for democratic living. Canada will always need citizens who have a thorough knowledge of ideals of good citizenship. The inculcation of these ideals - through the personality of the teacher, through the administration of the classroom, through the subject matter of the Programme of Studies, and through the methods of teaching employed - is accepted by teachers today as their responsibility to a far greater extent than ever before. (p. 8)
12A-14 The school must assist the pupil to master those skills that are essential to human intercourse in modern society. The development of many important skills involved in communicating ideas and emotions to others may be furthered by the suggested activities in English, Mathematics, Art and Music; skills in the conversation of materials to serve human purposes may be developed through activities classed as Agriculture, Home Economics, Manual Training and Crafts; actual experience in the social techniques of co-operative action is specifically indicated under the heading "Corporate Activities". The resourceful teacher will arrange his work so that many of the activities of the school, whether arising in the field of Science, of English, or of Social Studies, will be organized to provide this type of social experience. (p. 9)
And so on

Figure 0.9 – An excerpt of Raw Data from the Subdimension "Social Skills" in Dimension A "Elements Used During Integration" for Period 2

After all the coded excerpts were placed in their respective innovation profile sub-dimensions, each sub-dimension was reviewed as to its importance in relation to the Ministry's definition and uses of curriculum integration. Importance, for this study ranged from a "Negligible" priority, to a "Low", a "Medium" or a "High" priority. Each of these priorities was assigned a numeric importance (0 to 3). The operational definitions of these terms are described in detail in Appendix B. Finally, to aid the reader in comprehending the choices that were made, and to get

an overall feeling for the Ministry's position concerning the sub-dimension, quotations were combined and distilled into one or two explanatory sentences. These are accompanied by a listing of the code numbers included in the sub-dimension. For example:

	Social Skills
High Priority (3)	One of the main objectives of education is to be a good citizen and abide by the decisions of the majority (2A-3, 2A-4, 2A-12) Social interaction is necessary (2A-5, 2A-6). Peace through cooperation (2A-3, 2A-4, 2A-48, 2A-51, 2A-83, 2A-89, 2A-104) Be socially acceptable (2A-4, 2A-8, 2A-10, 2A-13, 2A-49, 2A-14) Must learn rights and responsibilities (2A-9, 2A-62, 2A-76, 2A-45, 2A-47, 2A-51, 2A-52, 2A-101, 2B-6, 2B-11, 2B-12) Utilize the "Enterprise method", corporate activities and courses in socialization (see 2A-14, 2A-20, 2A-21, 2A-23, 2A-24, 2A-26, 2A-28, 2A-30, 2A-35, 2A-37, 2A-39, 2A-42, 2A-44)

Figure 0.10 – Final Subdimension "Social Skills" in Dimension A "Elements Used During Integration" for Period 2

The corresponding page numbers for each code is included in Appendix A. The final profiles for the Ministry (one profile for definition, the other for implementation) were then used as the basis for decisions as to the Period's perspective on the term. The actual profiles are included in Appendix C, while detailed descriptions and conclusions for each period are shown in Part I.

The Context Sections for Periods 1-9

Hargreaves et al (1996) do point out that Case's approach has some weaknesses: namely, it does not explain how and why particular aspects of integration usually cluster together in particular ways, or what it is that accounts for these patterns. It also makes no explanation as to why some methods of integration are more commonly used while others are considered too difficult. They conclude that "conceptually open typologies of this kind can, however, be useful maps for empirical study and practical improvement if they are also combined with sophisticated understandings of how and why particular patterns of integration emerge in particular ways."(p. 102). Preceding the profiles in each period, therefore, the study includes a context section that

relays some of the major underlying political and social forces at work during each historical period. It will also explain the pertinent actions taken by individuals within the Ministry to bring the curriculum documents to fruition. It should noted, however, that while an earnest attempt was made to reconstruct what happened during the nine periods of time as accurately as possible, this can never be fully accomplished, since information from and about the past is always incomplete.

The research that was performed in context areas of this study was accomplished in alignment with Fraenkel and Wallen's (1990) interpretation of "Historical Research" (pp. 432-440). Four steps were involved in this process. These included:

> ...defining the problem or question to be investigated; locating relevant sources of historical information; summarizing and evaluating the information obtained from these sources; and presenting and interpreting this information as it relates to the problem or question that originated the study. (p. 434-5)

After the historical periods had been set by the curricula, I began the task of finding the main forces and persons that were involved in guiding the documents' creation and tenor. Initially, I consulted the most readily accessible secondary histories of the Ontario public education system in the twentieth century, namely the works of Fleming (1972) and Stamp (1980). They directed me back to the Archives of Ontario, indicating specific markers to look for (especially key numbers of untitled boxes). The archives proved useful for the years 1936 to 1970. An especially large amount of material clustered around the periods leading up to the Hope Commission (1950) and the Hall-Dennis Report (1968). After 1970, however, special permission had to be obtained to access material. As this appeared to be an onerous and lengthy undertaking for an area that may prove to be less than completely germane, I chose to reconstruct the subsequent periods from more readily accessible locations. For Periods 6 and 7, I returned to OISE and made use of its collection of official memos, speeches and contemporary media sources. For Periods 8 and 9, I supplemented these references with press releases and other documents displayed on the Ministry's official website. After coming to some general

understanding of the entire "story" of the 1938-1999 era, I finally conducted an updated review of secondary sources to compare the specific actions of the Ministry to the wider forces at work.

Phase 2 - The Ontario Teachers' Profiles of Curriculum Integration

This phase involved a case study of multiple sites for the purpose of determining actual practice of curriculum integration in the contemporary Ontario school setting. It was guided by the second research question.

Sample

Grades 7 and 8 hold a singular place in Ontario's curriculum integration initiatives. Poised uneasily between elementary and secondary school levels, these "Years of Transition" have been a critical area of dispute and transformation for the better part of this century (as will be seen in Part I, Dimension D). At different periods, this level has reflected the integration issues of both higher and lower grades. As well, numerous researchers (e.g., Arnold, 1985; Brazee, 1989; Lounsbury & Vars, 1978; Stevenson 1986), and most noticeably the work of James Beane have maintained that the Middle School Years should be thought of as the "natural home" of curriculum integration (see especially Beane, 1975, 1995, 1996; Beane & Lipka, 1987). It is for this reason that the proposed research has singled out the Grade 7-8 years as its focus of study.

Today, grades 7 & 8 are generally distributed in two separate fashions throughout the province of Ontario. They are either encompassed as a slightly distinct entity within a larger elementary school (K-8) or exist as an entirely separate middle school. Most school boards oversee both types of arrangement within their boundaries. The sites for phase two were chosen from a diversity of each type based on separate/public and urban/rural distinctions - inevitably, 8 schools (and 43 participants) were singled out. It should be noted that together they are seen as components of one case study (Eastern Ontario) rather than 8 multiple case studies. As such,

there will not be any rigid, systematic cross-case analysis (although some will be made occasionally). Rather, the intent of this sample was to maximize the variation of schools at this level.

Instrument

Two instruments were constructed for phase 2, essentially deriving from the same source as the instruments for phase 1. These were, however, modified to accommodate a field investigation rather than a document study. A semi-structured interview protocol was developed as the primary instrument in this phase of the research. Using the questions asked by Case and associated scholarship, it posed a series of questions that were answered by teachers and administrators at the selected schools (see Appendices E & F). Before these were administered, they were submitted to the supervisory officials at each chosen school board for feedback and criticism and changes made accordingly to fit the Eastern Ontario situation (see below). The second instrument was the innovation profile created in the first phase. Rather than consisting of nine periods and guidelines, however, profiles were completed on behalf of the 43 participants.

Data collection and Analysis

i. School Board level

A package was sent in August 1998 to the relevant superintendents of the proposed sample of schools. It contained a request for permission to interview principals and teachers at specified school types under their jurisdiction, a letter of introduction from my supervisor, a copy of written sanction from the University of Ottawa's committee of ethical procedures in research, and a copy of the instrument I would be using. The request allowed these officials to determine the precise schools based on the given criteria. In total, five school boards from Eastern Ontario were contacted in order to meet the proper specifications:

1. ***Urban Public Board*** - gave permission in October 1998 to interview one elementary (school 8) and one middle (school 3).

2. ***Urban Separate Board I*** - gave permission in December 1998 to interview one elementary (school 2) because this was the only mode that contained Grade 7-8.

3. ***Urban Separate Board II*** - gave permission in January 1999 to interview one middle (school 6) because this was the only mode that contained Grade 7-8.

4. ***Rural Separate Board*** - gave permission in October 1998 to interview one elementary (school 4) and one middle (school 1).

5. ***Rural Public Board*** - gave permission in December 1998 to interview one elementary (school 5) and one JK-OAC (school 7).

As well, these board level officials were asked to review the instrument for validity and merit. They returned them with only minor changes to certain phrasings.

ii. ***Contacting the Schools***

Along with their permission and modifications to the instrument, the supervisory officers sent me the names of the chosen schools, their telephone numbers and the contact persons (in all but one instance this was the principal). I then contacted principals in the order that their telephone numbers came into my possession. The first was school 3 (henceforth known as the "Open Option" for reasons which will become apparent), which I visited first in early November, 1998. The principal immediately and happily accepted, saying that he felt my research was very interesting and important. I performed the first interview with him within two weeks, and he said he would recruit the teacher-participants and organize their interview dates.

I visited schools 1 (the "Charitable"), 2 (the "Forces Base"), and 4 (the "Lone Scholar") in mid-December and made initial contact with the leaders. Like school 3, they also volunteered to recruit participants and organize interview dates. However, their enthusiasm concerning my presence varied considerably. In school 1, the vice-principal said that she and her teachers were extremely pleased to participate in any way. They saw it as a bit of an adventure, a taste of the outside. The School 2 principal was rather more pragmatic – he viewed this as a cheap form of

professional development as the questions would help his teachers think about the education process. The principal at school 4 was a little more reticent about the whole process. In fact, I got the distinct impression that she viewed her allowance of my research in her school as a favour to the supervisory officer. At the initial visit, she refused to meet with me and I was directed by the secretary to allow one of the teachers to organize interview times and pick recruits.

This pattern of allowing the principal to organize and recruit participants continued for the next three schools. I made initial contact with School 5 (the "Gemini") in late January, school 6 (the "team leaders") in mid-February and School 7 (the "Retrospective") at the beginning of April. Once I met with these people face to face, there was very little doubt that the interviews would not take place. Once they realized that each interview could be fitted into a 45-minute break in the teachers' schedules, and that the interview questions were rather benign, they seemed quite willing to participate. Although none mentioned it, it almost appeared that they wanted my "easy" research project now. In this way, they would have credibility to reject any future research projects that may entail more elaborate and time-consuming work.

The school type that I had serious trouble in locating was the urban-public-elementary. After I received permission from the urban public school board and was given the name of a school, I telephoned the principal in October, 1998. The principal said that he was interested but would need time to organize a meeting. He stated that now was not a good time but that he would get back to me. I waited a month and then telephoned him again. He repeated his previous statement – he was interested, but that now was not a good time, and that he would call me back soon. I waited yet another month and called him in December. This time the principal was nowhere to be found, so I left a message. Finally, in late January I made one final telephone call. Seemingly flustered, the principal stated that he had sent me an e-mail the previous month stating that his school was not interested in my research.

I re-contacted the head of research at this urban board, who gave me the name of a second school, and asked me to wait two weeks to give the principal time to read the package. After the appropriate waiting period, I called the principal who promptly said her school was too busy for this research project that particular term. This was now mid-February. The procedure was then repeated with another school. This time the principal initially agreed if she could convince her teachers. After three weeks of discussion however, the principal then informed me that the teachers had taken a vote and unanimously agreed not to do the research project. By this time it was mid-April, and I was becoming increasingly concerned that I would not find an eighth school before summer break. The procedure was repeated one final time. I made first telephone contact with the principal of what was to become school 8 (the "Inner-City Innovators") in early May. She said that she was very interested in the project as their school had tried various experiments with curriculum integration. I was invited for a visit, and conducted interviews up to the end of May.

iii. School Level Collection, Codification and the Trustworthiness of the Data

The data collection within the eight schools followed a two-step procedure. First, key personnel (including teachers and administrators) were given a space of time, usually two weeks, to review and formulate responses to the questions. Unlike most research studies, which provide no advance organizer, it was felt that this protocol would help participants prepare and recall in greater clarity their definition and use of integration in practice. It was hoped that this would increase useful responses in the limited time allotted for the face-to-face interview. The participants were interviewed on the basis of the guide with sufficient flexibility to allow unperceived issues to emerge. A portable audiocassette tape recorder with a built-in microphone was used to record each interview. As it was thought that this process would more accurately reflect the details and context of each site, the actual words of the participants (rather than researcher field notes) formed the basis of study. Dates of interviews are listed in Appendix G.

The entire span of interviews was transcribed over a period of 3 months during the summer of 1999. These interviews were then coded based on School, Participant, Quotation (a chart of the coding system is shown at the beginning of Part II on p. 292). **MPU/a-5**, for example, would represent the fifth response from Participant "a" in the Middle, Public Urban school. Each transcript was then mailed to its corresponding participant in September 1999 for verification and feedback. This allowed me to conclude that the participants' responses were beliefs held over a period of time and not momentary whims given on the day of the interview.

Once returned, these coded data were then transferred to the innovation profiles (one profile for each participant), based on their matches to the specifications according to Case's modified typology. As mentioned above, the data alone were used as the basis for the matching process – no field notes or interviewer opinions were added as it was thought that this might corrupt the findings. As in Part I, each sub-dimension was reviewed as to its importance in relation to the participant's definition and uses of curriculum integration. Again, importance ranged from a "Negligible" priority, to a "Low", a "Medium" or a "High" priority. Each of these priorities was assigned a numeric importance (0 to 3). The basis for these priorities is outlined in Appendix D, and the coded numbers of responses are listed in Appendix H. The final profiles represent an aggregation of the participants' perspective (one profile for definition, the other for implementation) and were then used as the basis for decisions as to the case study's perspective on the term. Other methods to insure reliablility such as inter-rater agreement on the assignment of codes to segments of qualitative data could have been used (Bergan, 1980, Tsui, 1983). However, as I, myself conducted all the interviews, transcribed all the data, segmented it, codified it and placed it within the matrices, I believed that a sufficient amount of validity could be maintained. As well, it was believed that this study's relatively small sample size would offset the need for these more complex approaches.

To determine actual events and use of language at each site, a certain amount of triangulation was employed. For example, in one instance (MCR), one teacher discussed the reasons as to why the local Science Fair was abandoned as a mandated student activity. In an unsolicited response, the vice-principal verified this cause. At another site (JOPR), one school-wide project was described by various participants, but from different angles. It was found that while all engaged in the same event, they had different objectives for participation.

Lastly, it should be mentioned that while a follow-up exercise involving a group meeting of all the participants within each site was tentatively planned, it never came to fruition. While I initially felt that it would have helped to establish a greater contextualization of the term, I inevitably decided that this might also prove counter-productive. While some shared definition would no doubt be established, it was my fear that stronger voices in the group would prevail and the numerous weaker ones swept away. I concluded, therefore, that the basis of study would be the individual teachers rather than the school. A second, more pragmatic barrier also kept me from pursuing this angle. By the time a second round of interviews was made possible, many of the participants (especially the administrators) had moved on to other schools. This had created drastic and unreconcilable differences to the dynamics that had originally been in place.

Post-Phase Analysis

Guided by the third research question, this analysis endeavoured to determine what comparisons can be made between Phase I and Phase II, along with what factors may be influencing the relationship between the Ministry's perspective on curriculum integration and its implementation, and actual practice or the school's and teachers' perspective. This analysis will compare the schools' profiles with the Ministry's and interpret discrepancies based on instrument data and context. The results are displayed in the Conclusion section.

Part I

The Department of Education

Perspectives on Curriculum Integration

PERIOD 1

"The Little Blue Book"

1938-1942

Context of the 1938-1942 Curriculum

The first period of this study is dominated by one document: the Programme of Studies (1938). It has been called a "revolutionary" step in Ontario educational policy, both in terms of its approach to teaching and in its philosophy of education in general (Fiorino, 1978; Fleming, 1972d; Phillips, 1957; Stamp, 1982; Staniford, 1938).[1] Of most importance to this study, the 1938 Programme represents the Ontario Department of Education's first active foray into the promotion of curriculum integration. To understand how radical a shift this was for the provincial education system, a brief overview of the historical context may be relevant.

Between the creation of the Ontario Department of Education in 1871 and the mid-1930s the main thrust of its official curriculum changed very little. It adhered to a formalized, discipline-based approach to education involving rote-learning, drill, and memorization. Guidelines were created by a handful of subject specialists working under the Elementary Education Branch of the Department. A sizable number of inspectors were then charged with the enforcement of the curriculum at the school level, simultaneously evaluating and guiding teacher performance in an effort to secure uniform standards throughout the province. Finally, to test students' capabilities of basic skills and factual knowledge, standardized departmental exams were given at almost every level of the elementary and secondary systems. Special emphasis was placed on the Grade 8 exam as a basis for promotion to the high school level.[2]

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[1] At the time, McCutcheon (1941) stated that "the school is no longer merely a place of formal instruction. It is rather an environment which stimulates growth in the widest sense, growth in the capacity for self-direction and self-dependence, in understanding and appreciation, in emotional control, in social adaptability, in will-power and character, and in the ability to sense values." (p. 121). Even the Dennis-Hall report (1968), written thirty years later paid tribute to the document which it saw as far in advance of its time for Ontario. "The simple but startling truth is that virtually every idea in it, with only one immediately noticeable exception [religion], might have been expressed by educationally enlightened and advanced authors today." (p. 70)

[2] See Gidney's From Hope to Harris for an outline of the role of the inspectorship, province-wide examinations and the importance of Normal Schools in the enforcement of government policy (1999, pp. 19-21). Through policy-making prerogative, Gidney explains that the Department "exercised supervisory responsibilities directly and emphatically" (p. 19).

Piecemeal additions to the curriculum (e.g., manual training and household science) and occasional changes to the textbooks were introduced as a result of outside pressure[3] but, until the late 1930s, Ontario undertook no wholesale revisions of the curriculum. The educational historian W.G. Fleming (1971c) maintained that the slow pace of reform in Ontario was in large part due to the inability of dissenting voices to be heard in the hierarchy of the education system (pp. 2-3).[4] At this time, the structure of the Ontario Department of Education consisted of a very centralized directory, in which decision-making concerning changes to the curriculum followed a strict top-down flow (see Manzer, 1994). Unless petitioned, the Department received little feedback from the lower levels of the hierarchy.

This centralized bureaucracy was allowed to flourish largely due to the relative isolation of teachers within the educational system. Gidney (1999) points out that,

> In 1948, for example, Ontario had some 6800 elementary schools, nearly twice as many as there are today, and that despite a population a third the size. Forty-four hundred of them, or 71 percent, had one teacher and a single classroom. Another 600 had but two each. Only 853 had six classrooms or more, and there were just 150 elementary schools which, in modern mode, had twenty or more classrooms. (p. 11)

Within these schools, it was quite normal to see the same teacher instructing all elementary grade levels on all subjects. Students were grouped into age levels and given a special row or area of the room. They were then expected to carry out a great deal of quiet seat-work while teachers employed a monitorial system, moving from student to student as time prevailed. In her vivid recollections of the one-room school, Jean Cochrane (1981) explains, in detail, the ubiquitous nature of this teaching method. Stamp (1982) concluded that this frequently led to a mind-dulling process which "often killed any natural curiosity young minds might have had about these subjects" (p. 57). To maintain control over the students, more advanced Ontario teachers tried a

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[3] As early as 1890s there had been push for reform. James L. Hughes, the inspector of public schools for the city of Toronto, for example fought for kindergarten and manual training (for details and numerous other examples, see Patterson, 1986, pp. 62-65).

number of normative experiments such as the issuance of merit cards (Houston & Prentice, 1988, pp. 264-266) or a bell system. However, well into this century, corporal punishment endured as the most effective means of keeping discipline (Axelrod, 1997 pp. 58-60).

In retaliation for what Axelrod (1997) described as "primitive conditions", a number of teachers' groups in Ontario placed continued pressure on the Department for educational reforms that they felt would better serve society. This could be achieved by making a greater effort to respond to the students' need for activity and with subject matter that "more closely related to [their] personal experiences and social environment" (Lawr & Gidney, 1973, p. 105). This new "child-centred approach to education" was not an unfounded technique but rather based on a particular school of thought. Early experiments in this method had been undertaken in Europe by Pestalozzi, Froebel, and Herbart in the first half of the nineteenth century, and adopted in the United States by "Naturalist" philosophers like Emerson and Alcott.[5] For most of the century, however, this approach lay dormant in North America, praised by a small number of isolated intellectuals. It was only in the century's last decades that it managed to gain wider acceptance as more and more educational associations were persuaded of its benefits. Both the Ontario Teachers' Federation and the Ontario Education Association, for instance, formally adopted aspects of the child-centred approach following a visit to Canada by Colonel Francis W. Parker in 1884.[6]

After 1900, the work of American philosopher John Dewey and the organization that he helped found, the Progressive Education Association (PEA), added to this impulse for

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[4] A visiting British inspector, E.G. Savage, further commented upon the extreme centralization of the 1920s period. See Mosely (spring, 1968, p. 3).

[5] For a full overview of the "Naturalist" and "Transcendental" school of educational philosophy, see Bowen & Hobson (1974), Downs (1975), and Butler (1968).

[6] Cochrane (1950) discusses the overwhelming influence that child-centred spokespersons like Parker had on instruction in Ontario Normal Schools and the study of child psychology as the 20th century progressed (p. 203). However, she does admit that much of this approach was limited to the very early years of education (such

educational reform. Dewey argued that every human innovation had resulted from curiosity, cognizance and experimentation, and that the intuitive interests of the child should be used as the starting point of instruction. The teacher's task was to motivate children to work co-operatively on these activity-oriented projects, and to link the child's immediate interests with the problems and concerns of the larger world (Dewey, 1900; 1916).

In Canada by the late 1920s, many provincial departments of education began to embrace the major tenets of "Progressivism" (as espoused by the PEA) that had already been accepted by many States south of the border and by Great Britain.[7] The Ontario government, however, did not join this movement. Throughout the 1920s and 1930s, newspapers and printed political debates made scathing comparisons between the cutting-edge of educational thought in the Western provinces and the mired conservatism of Ontario's educational system (see Wilson, Stamp & Audet, 1970, pp. 377-78). One of the members of the Alberta government, C.L. Gibbs (1928), reflected the sentiments of many westerners when he expressed the hope:

> that when the [Alberta] Department mountain had finished its labours there would not issue forth some little mouse, grey with Ontario dust and heavy with Ontario prejudice, but that we would have an Act that would really meet our particular needs and be in harmony with progressive ideals now becoming current in the educational world (p. 3).

If the Ontario Department of Education resisted such change, however, the majority of Toronto-based educational scholars all promoted "progressive education".[8] The Ontario branch

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as kindergarten). See also Campbell (1975) for the impact of Parker on North American "Natural" education methods.

[7] "Progressive" child-centred programmes of study were adopted by British Columbia (1925-1935), Saskatchewan (1929), Nova Scotia (1930) and Alberta (1930) see Phillips (1957, p. 436). For an in depth account of the spread of progressive thought in Western Canada between 1900 and World War II, see Patterson (1986, 1990).

[8] This circle included such prominent educators of the time as J.P. Putnam, J.G. Althouse (principal of the Ontario College of Education), C.C. Goldring (Director of education of the Toronto School Board), and Thornton Mustard (director of the Toronto Normal School). For a complete overview of their lives and work see Stamp (1982), Wood (1985). Guillet (1960) relates their speeches given at the annual meetings of the OEA throughout this period. The progressive agenda of this forum is very evident in the rhetoric as early as 1922 (in which the majority of the conference was given over to Kilpatrick's "project method").

of the New Education Fellowship (the equivalent to the American PEA), the Ontario Education Association, the three teachers' federations, the trustees' association, and the Home and School Federation all openly disparaged traditional, disciplinary curriculum with its rote-learning, and actively promoted an "inquiry" approach to learning.[9] By 1934, these associations had merged their resources to form the Ontario Educational Research Committee; their united goal was "a revision of the curriculum...that it may specifically be adjusted to growth needs and experiences of the social group for which it is intended" (Morris, 1934, p. 10).

Until 1934, the Department adeptly avoided responding to such demands for change. This may have been due to their rigidly centralized system or to the three-decade perpetuation of Conservative governance (Patterson, 1986, p. 63). With the ascension of a new Liberal government and the appointment of a new Minister of Education, Leo J. Simpson, however, it became more receptive to the calls for educational reform. In 1936, the Department of Education announced that a committee would be appointed to create a new Programme of Studies for the elementary system.

Whether influenced by his senior departmental officials[10], the continued pressure by the Ontario educational elite and other provinces, or simply by the spirit of the times, Simpson insisted that the new curriculum would be based on more "progressive" methods. To facilitate this process, Thornton Mustard and Stanley A. Watson (principal of the Ottawa Normal School), both sympathetic to the progressive movement, were appointed as co-chairs of the programme

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[9] For a more in depth overview of the progressive movement in Ontario, see Gidney (1999, pp. 31-32), Kach et al (1986, pp. 62-67).

[10] Both Simpson and his deputy Minister/Chief Director, Duncan McArthur seemed to have been well versed in the American, British and Canadian innovations brought forth by the philosophy of "progressivism" (see Fleming, 1972). In fact, McArthur occasionally met with J.H. Putnam at the Royal York Hotel in Toronto to discuss issues in education. In a letter to McArthur after just such a meeting, Putnam wrote to him with the hope "that you are planning some really progressive school legislature and believing that you and Dr. Simpson are sincerely desirous of doing something worthwhile for the Province." He ended the letter urging McArthur to establish a decentralized system, giving local boards more responsibility, particularly in maintenance and equipment of elementary schools (see AO, RG-2, P-3, J.H. Putnam to Duncan McArthur, Ottawa, 16 November 1934, pp. 1, 5, 6).

committee (Fleming, 1972a). When the Programme of 1938 was issued,[11] the new ideas it expressed reflected the trend seen in other provinces' guidelines. Like the Alberta programme, the Ontario "little blue book" for grades 7-8 extended great praise for the progressively inspired, British "Hadow Reports"[12] as well as lengthy quotations of the documents in its introduction (see 1A-2 to 1A-17). It was Hadow's 1926 report on "The Education of the Adolescent" that, in fact, formed the basis of Ontario's new curriculum in 1938. Two distinct approaches were recommended in this report that may help to explain the new direction taken in Ontario education:

1. A belief that students could be educated more effectively if they saw the relevance of what they were learning, if they were educated through enjoyable experiences, and if they were treated as individuals. In other words, a commitment to "child-centred" education.
2. A new conception of human development segregating 12 to 15 year olds as a singular group, *adolescents*, with specific needs.

Features of the Period:

Sources for this period consist of one document: the Programme of Studies for Grades 7 and 8 of the Public and Separate Schools. While a committee of teachers was seconded to create the document, Fleming (1972a) attributes sole authorship to its co-chairs, Mustard and Watson (p. 184). The 124-page, blue-covered booklet begins with an introductory preamble section (8 pages) outlining the general philosophy behind the changes made to the curriculum and the consequences that they will have in the classroom. This is followed by more detailed descriptions of the 7 obligatory and 3 optional subjects (reduced from 15 mandatory disciplines)

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[11] The Programme of Studies for Grades 7 and 8 ("the little blue book") was an extension of the Programme of Studies for Grades 1-6 ("the little grey book") that had been released in 1937.

[12] Consisting of 20 leading English pedagogues under the direction of Sir W.H. Hadow, the Consultative Committee of the British Board of Education was mandated to perform ongoing assessments and recommendations of post-World War I educational issues. The committee issued several pivotal reports between 1926 and 1934.

that were to be offered at all public and separate schools within the Ontario education system. These subjects consist of

- Social Studies, English, Mathematics, Science, Health, Music and Art (obligatory)
- Crafts, Home Economics and Agriculture (Optional)

The final 17 pages list the authorized textbooks and recordings allowed for use in the classroom.

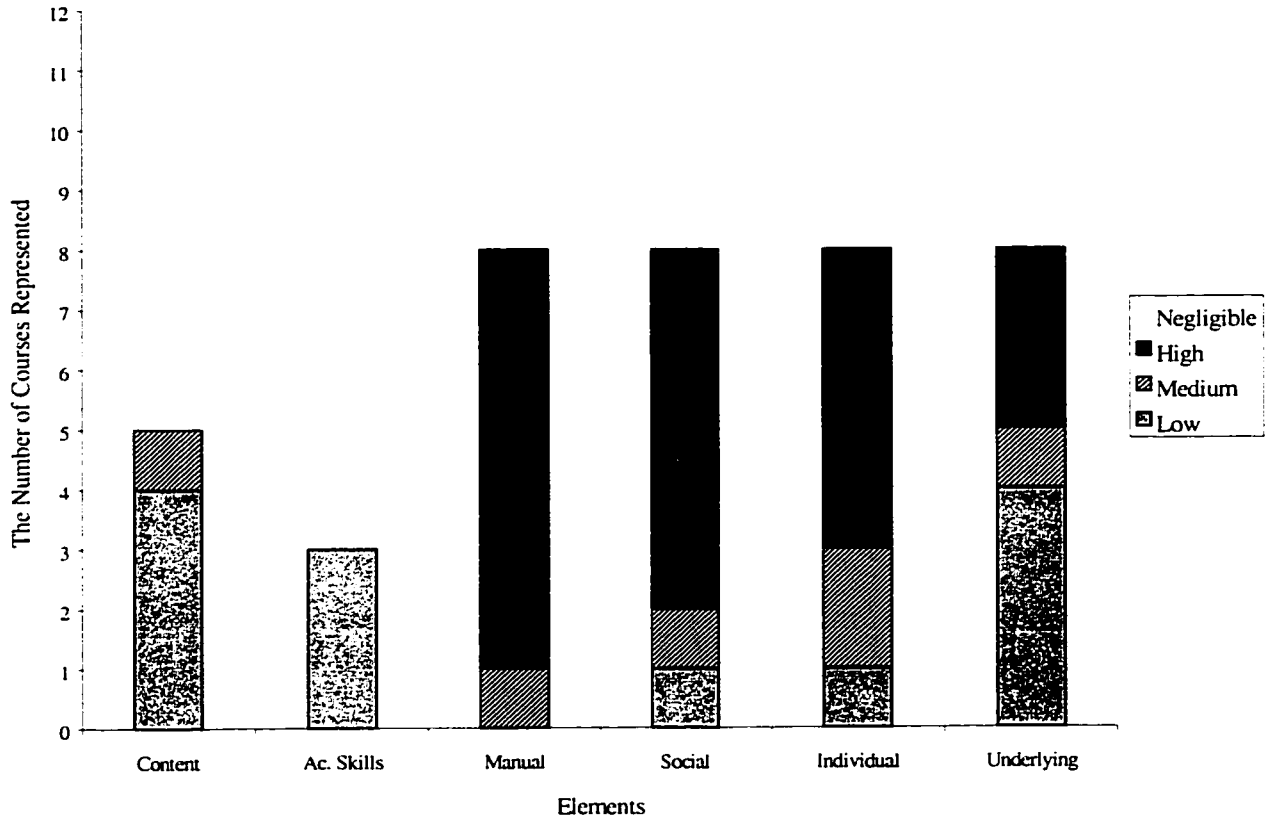
In accordance with the views expressed in the document, the Liberal government abolished the standardized Departmental lower and middle school exams in 1940. Schools were now given the responsibility of creating and applying individualized evaluation methods deemed appropriate to their location.

Analysis of Dimension A: Elements Used During Integration

The general pattern that emerges in period 1 clarifies the revolutionary intent of the Department in creating this new curriculum. Obviously abandoning the view of education as a rote process of content and skills attainment required to meet the utilitarian aims of society, the Department now envisioned a more complex role for the public school system. Paramount was its responsibility to inculcate the philosophy that the needs of the individual and of society should be balanced. Yet, to facilitate the enhancement of such indefinite qualities, the Department relied primarily on co-curricular Corporate Activities, and on a healthy dose of practical and manual tasks included as part of almost every subject area (1A-61). The former was intended to demonstrate the efficacy of social participation as well as providing valuable training in social values and skills (1A-55). The latter was expected to provide concrete opportunities for each student to explore and develop his or her own special aptitudes and interests, thereby facilitating personal growth (1A-51). It was also espoused as a compliment to strict academic skills training as a "stimulus to higher intellectual effort (1A-15).

The new curriculum, therefore, applied the first, hesitant steps to a broader integration of elements within the curriculum. Minimal integration of content and skills aligned with substantial integration of practical work, social skills, and individual development all supported by a well-defined underlying principle. However, the Programme relied heavily on the preamble to assert its new direction to teachers and the relevant stakeholders. There was no consistent repetition and elaboration of each form of integration in all subject areas. This holds especially true for the more ephemeral elements of Individual Development and Underlying Principles.

Chart 1.1 - Dimension A (The Importance of Elements used during Integration)



Note: A more detailed description of Dimension A for all periods are available in Appendix C (pp. 489-618)

Analysis of Dimension B: Objectives of Integration

Student-Centred Integration Paramount

Following the beliefs outlined in the Hadow report, the authors state explicitly that the primary reason for integrating the curriculum was "...inspired, not by an attachment to conventional orthodoxies but by a vivid appreciation of the needs and possibilities of the children themselves" (1A-4). In alignment with the balanced emphasis on the Social Skills and Individual Development forms of integration, the primary objective of the 1938 Programme was to provide equally for the child's needs for i) self growth and ii) a desire to adapt to his social surroundings (1A-7). As such, the authors recommend that "uniform schemes of instruction are out of the question if the best that is in the children is to be brought out" (1A-8).

This objective was to be met by a three-fold approach: First, the curriculum should recognize that students only learn when they are actively interested and engaged (1A-37). What is needed is:

> something more than a passing interest. We attach much importance to this last point. An interest which stimulates the pupil's curiosity, and urges him to put forth serious efforts to acquire further knowledge, obviously leads to a steady advance in the standard of attainment and an increasing degree of accuracy and thoroughness. Once the pupil's interest is genuinely aroused, nothing but the best, according to his insights and capacities, will satisfy his aspirations. There are few teachers who have not seen, in one connection or another, the remarkable excellence of the work which is done by pupils when the subject has gripped their imagination and aroused their interest and enthusiasm (1A-11).

The subject areas do follow this appeal. Social Studies entreat teachers to look at world events within the students' interests and capacities (1A-24) and to take an interest in inquiring into past events (1A-20), while Mathematical problems accordingly relate to the child's actual interests and experiences in the school and home (1A-29, 1A-31). By reference to easily observable phenomena all around them the children may be led to discern and respect the operation of other such principles in the ordinary happenings of everyday life (1A-33). In Science, for example, the conditions of student's ability and interest caused the guideline to direct teachers to tailor the

course "...as largely as possible by the children's actual evident interests rather than by an adult logical arrangement of the subject matter" (1A-35).

Second, the curriculum had to be adaptable to the student's natural bent. This meant more than just trying to relate subject matter to things that should interest students. It required teachers to actively seek out and encourage student's interests, in all their diversity:

> But we would not be understood to suggest the possibility of interesting every pupil in every subject in all its aspects, or to imply that there is no drudgery to be undertaken. On the contrary would urge the recognition of differing interests. Pupils should be encouraged to follow, within reasonable limits, any special bent which they may possess (1A-11).

It was hoped that in most subjects, like Science, students would find their own approach to solving problems. The teacher was to "...expect the children gradually to build their own generalizations of science - amending, correcting, confirming, and enlarging their ideas, as knowledge grows from more to more" (1A-35). Art especially encourages this process (1A-45). Criticism of their work by the teacher is bluntly discouraged (1A-46). In Crafts, students are to take initiative in selecting their own projects and completing them independently (1A-49, 1A-54).

Third, the Programme states that all work, regardless of its type (academic or practical) must be in accordance with students' capacities and abilities (1A-10; 1A-11; 1A-15; 1A-24; 1A-34; 1A-38; 1A-46; 1A-53). Therefore, in Period 1, the curriculum is primarily child-centred, defined as:

1. Relating subject matter to the student's own life and experiences;
2. Encouraging the student to develop special aptitudes and interests;
3. Limiting content and exercises to the student's capabilities.

The authors of the 1938 Programme relied substantially upon curriculum integration as a tool for enabling the 3-fold approach to be reached: it was a way of learning that could be understood by children, whereas the disciplinary approach was beyond their comprehension.

Subject-Centred a Distant Second

While the central objective of the new curriculum was to meet the needs and abilities of the child, the curricular reforms led to a certain degree of subject integration and a unifying of knowledge, if only as a by-product. The designers of this curriculum were emphatic in their opposition to the sub-division of subject areas beyond its uses as a tool to break large amounts of information into efficient groupings. They maintained that this approach had only limited applications when teaching elementary age students. Unless the learner could fit the subject-related knowledge into some larger and more comprehensive picture, s/he would simply become bewildered, and the objective was to avoid "*confusion in the mind of the pupil*" (1A-12; see also 1A-13; 1A-18; 1A-27; 1A-35; 1A-51; 1A-57).

The Programme did not go to the furthest extreme, however: the abolishment of subject areas altogether. Rather, it struck a compromise. Subject areas still existed but would be broadened and more interrelated (1A-12). Subdivisions like grammar and literature or biology and physics were thereby annulled in favour of the comprehensive core subjects of Science, Mathematics, Social Studies and English. (1A-13). The reasoning behind this was to meet the changing needs of the students, to reduce overlap caused by isolation of subjects, enabling "a definite economy of time" (1A-12), and making a more flexible time-table. Aside from the designers main intent to reform the approach to adolescent education in general, therefore, there was a perceived need to reduce the complexity of and subdivisions in the curriculum. Thus, the new Programme split the timetable into 7 obligatory and 3 optional subjects (1A-18). Within the subject areas, the related disciplines were to be grouped incidentally as the opportunity presented itself rather than given a formal structure (1A-34, 1A-35). Moreover, natural connections were to be reinforced, such as those that existed between Health, Science and Home Economics (1A-40).

The Addition of Social Continuity and Political Change

The Programme is fairly specific about the social aspects it wished to integrate into a curriculum that had, until this point, been fairly academic. It states that students must be educated in a way that reinforces the "claims and needs of the society in which every individual citizen must live" (1A-7, 1A-14). Students are to learn about the past so that they may fit themselves into society today (1A-19; 1A-20; 1A-21). They must learn the proper attitude towards the present government (1A-25) and family life (1A-56), learn how to communicate (1A-26), and appreciate past creations (1A-52). The Programme expresses great hope that through the integration of certain key issues into the curriculum, society will receive a better, more skilled workforce and citizenry, thereby strengthening the character of the nation (1A-5; 1A-16; 1A-29; 1A-30; 1A-32; 1A-41; 1A-43; 1A-58; 1A-61; 1A-62; 1A-63; 1A-65; 1A-67).

Nevertheless, the Programme also displays a hope to promote substantial changes in society by educating students in a different way. The new integrated method was intended to cut away "the dead wood of a formal tradition," and "an attachment to conventional orthodoxies" (1A-4; 1A-6). It also states its desire to make students more progressive through "humane or liberal education" that will try to balance the individual and society (1A-5; 1A-6; 1A-7; 1A-14; 1A-63; 1A-64). Lastly, seeing that leisure and enjoyment of free time was becoming pertinent, the Programme applies significant integration of practical work to teach students ways of using that time wisely (1A-5; 1A-16; 1A-26).

Analysis of Dimension C: Loci of Integration

Clearly, the great inspiration of this document was the Hadow Reports and little else. Based on the ideals set by the British example, the small Departmental committee created this programme with little stakeholder involvement and expected their orders to be carried out with the expectation of little feedback. Much of the relationship of curriculum development was a one-way process between two parties – the Department and the teachers. This may be seen as merely an extenuation of the traditional arrangement. The subject areas themselves were arranged and fused by the Department itself, and all other integration approaches left up to the teachers' discretion. Little mention is made about the role played by either board or school, which is logical for a period where both were practically non-existent in terms of curriculum development.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

Influenced directly by the Hadow Report, the Department viewed students in grade 7 and 8 as somewhat different from earlier or later grades. This is clearly indicated by its choice to create a separate curriculum for grades 7 and 8, distinct from the 1937 Elementary Programme. As the Grade 7-8 level embodied the heart of the adolescent years, it was felt that a curriculum had to be specifically tailored to meet the needs of this special age group.[13] However, the Department also created the "little blue book" as a natural extension of "the little grey book", signaling its belief that adolescents were still closely related to children in many ways.

[13] In fact, the document goes as far as advocating the creation of a separate school for the Grade 7-8 level (1A-5a).

Analysis of Dimension E: Integration Methods/Approaches

Primary Mode of Integration

The primary form present in this Programme of studies is ***Fusion***. The committee took 15 separate subjects and merged them to create 7. English, which had formerly been taught in three different courses as Grammar, Literature and Composition, is now taught in one large block of time. However, for the teachers' clarity, the English section is broken into reading, creative expression, oral communication, communication in writing and corrective teaching. These are to be combined in a natural format and to be instructed as the opportunity arises. The same applies to Mathematics, in which arithmetic, mensuration, algebra, and geometry are fused (1A-13, 1A-27). The sub-disciplines of botany, zoology, physics, chemistry, geology, astronomy, physiology and hygiene combined to be taught under the umbrella subject Science (1A-34). The sub-disciplines are addressed only when they may be of help in answering a question related to a general situation (i.e., in the kitchen). Finally, the long separated subjects of History and Geography, and a new addition, Civics, are fused to create "Social Studies" (1A-19, 1A-20). As seen in Dimension C, this process was solely created at the departmental level, and teachers were simply expected to follow these dictates.

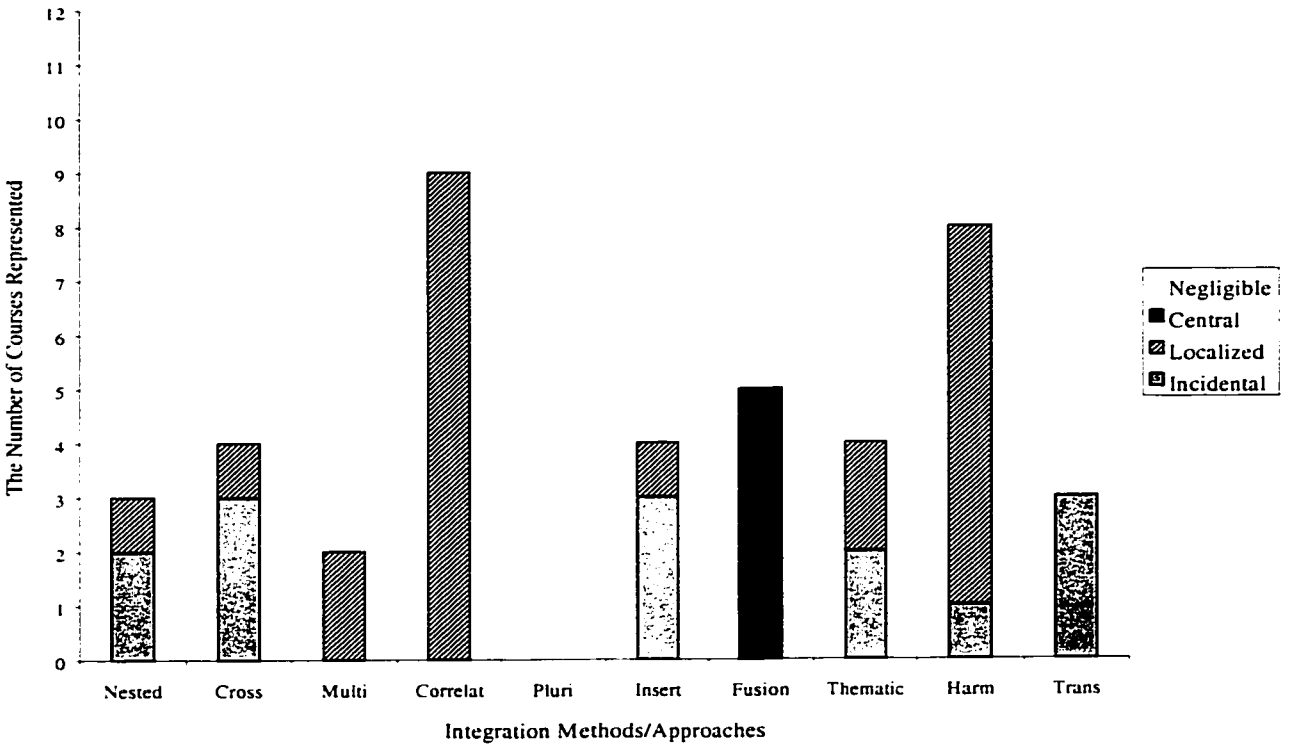
Secondary/Localized Modes of Integration

Although pursued in a rather haphazard way, ***Correlation*** plays an important form of integration throughout this period. With the unwavering belief that "there are subjects which share together an area of common ground" (1A-12), the Programme encourages teachers to make connections between subject areas so that students may see relationships. However, most reference to this take the form of suggestions put forth in each subject description in the curriculum.

Harmonization, while treated in a rudimentary way, also plays some importance in particular subjects. English states that it should form the backbone of any curriculum (1A-27) -

Art (1A-15) and religion (1A-17) state the same thing. Yet, none are mentioned to any significant extent anywhere else in the document. What does appear throughout the Programme, however, is the underlying importance of "practical intelligences": the use of real life applications in Science and Math, the introduction of hands-on courses (such as crafts, agriculture, home economics, art, and music), and the application of current events in Social Studies. Left implicit is the harmonized belief in the student-centred education.

Chart 1.2 - Dimension E (The Importance of Integration Methods/Approaches)



Used to a much lesser degree is the ***thematic approach***. It is seen especially in Science (1A-36), Art (1A-49) and Crafts (1A-54, 1A-55), which begin each lesson with a situation or problem that must be solved, bringing in disciplines as needed. While the first two seem fairly interdisciplinary, Crafts tend to deal with solely material problems (i.e., fixing a chair).

Incidental Modes of Integration:

The remaining integrative approaches are quite inconsequential. The one fairly concrete and interesting suggestion is made concerning the ***Multidisciplinary approach***. It is suggested that Physical Education and Music form some sort of coordination to study "eurythmics" - a form of exercise with music quite popular in the early part of this century. This is mentioned once, however, as a suggestion and is not discussed again.

Analysis of Dimensions F & G: Implementing Curriculum Integration

If the inconsistencies in the Programme's definitions of curriculum integration indicate how unfamiliar this educational approach was for the Department, its hesitant guidelines for implementation dramatically prove it. From the preamble, through the subject-area descriptions, to corporate activities, the Programme shows a lack of comprehension regarding the difficulty teachers might face in applying this curriculum. In addition to the newness of curriculum integration and a child-centred approach, this characteristic of the Programme may also be explained by the sharp directional flow of curriculum design. As illustrated in Profile C (see Appendix C, p.501), the Department formulated curricular reform with no reference to its subsidiary partners in the schools system. Once the Programme had been created, the Department appears to have blithely believed that teachers would simply enact its principles with little effort.

Regarding the Department's awareness of potential implementation impediments (see Profile F, p. 504), mention is made only of subject attachment, specialized course structure, and the possible inappropriateness of traditional testing. The Department, as indicated by their assertions that subject specialization caused overcrowding of the timetable, appears to have some understanding of work overload. However, the impact of the teacher's new role as a social, practical and individual talent mentor seems to have generated no concern. Such pressure was

exacerbated by the Department's strict time limitation that demanded all schools implement the new Programme within a year or face suspension of their right to certification.[14] Similarly, the physical resources that would be required for the new courses and activities were simply assumed to be easily attainable. The new Home Economics course, for example, demands the purchase of iceboxes, stoves and other equipment; practical/manual tasks integrated into almost every subject area lay a heavy emphasis on crafts that would also require new materials. While the Department did allow schools a degree of latitude, it made no effort to establish a fund for resources or to grant extensions on full implementation.[15]

Relatively meager assistance was thereby proffered to schools by the Department to assist the implementation process. Even fewer steps were taken to encourage response from parents or the community to the proposed curricular changes. The wider school administration was also largely ignored. This, of course, may partially be attributed to the more minor, political role played by school boards at this point in the history of Ontario education. In short, the Department appears to have considered both the board and the principal of little consequence for the successful implementation of their new program. The one specific reference made to the principal in the entire document states only that the principal and teachers should take the initiative for religious training in the school.

Where the Department does exhibit a degree of sensitivity is with regard to the teachers' and students' involvement in the new curriculum. The document makes the effort to enlist teacher support by carefully explaining the benefits that should result from the changes. It also includes helpful suggestions for teachers scattered randomly throughout its subject-area

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[14] Although never acted upon, there are several examples of veiled threats made by certain departmental officials. More moderate superior officers in the hierarchy countermanded these forms of intimidation when petitioned by the coerced schools. See Central Registry Files, RG-2, Series P-3, Box 207 (files 2-993 to 4-87) Ontario Archives.

[15] Examples abound of memos sent by schools and boards asking for more time to raise resources for kitchen and shop equipment. See Central Registry Files, RG-2, Series P-3, Box 207 (file 3-183) Ontario Archives.

descriptions. Nevertheless, the Department seems to perceive teachers as qualified professionals who require no additional training to construct and deliver courses based upon these new principles. Perhaps the greatest assistance the Programme gives to teachers (and another recognition of its belief in their capabilities) is considerable latitude in adapting the material for their own particular circumstances. While open policy creation is minimal at best, it does allow for adjusting the order of topics and permits teachers to omit material when necessary.

Encouragement of student participation and involvement in their own education is by and large a by-product of the philosophy that governs this curriculum. Shifting from a disciplinary, subject-oriented system to a progressive, child-centred approach meant taking students' views of the educational process into some consideration. The entire thrust of the Programme is a heightened interest and acceptance on the part of the student. Therefore, it is necessary for students to be encouraged to take a certain possession of the work and activities they perform during the course of the school year. Student participation in choosing some themes and projects was requested by the Department, and it was suggested that students should assist in the maintenance of discipline and the school as a whole. However, it cannot be inferred from the Programme that students were given freedom to choose their courses, nor were they asked to assist teachers in determining the overall design and structure of the new curriculum.

Overall Remarks on Period 1

From the information gleaned above, certain inferences can be made about the integration process during this period. Specifically, the curriculum integration approaches (as described in Dimension E) chosen by the Department, and the process it chose to implement them (Dimensions F & G), reflect an amalgam of new philosophical premises (Dimensions A, B, D) and certain traditional Departmental structures (Dimension C). As shown graphically in diagram 1, this study's major assertions are as follows:

1. Integration philosophy and implementation process inherently incompatible

The 1938 programme preamble accepts wholesale the philosophical premises of the Hadow Report. This includes a belief in their newly defined concept of "Adolescence" which identifies it as a special phase in human development with particular needs and aptitudes (Dimension D). To accomplish this would entail a decentralization of responsibility to the teacher and students themselves as well as the abolishment of any standardized approaches to pedagogy. In short, to be successful, the Department would have had to enact a complete overhaul of the existing structure of education that reflected the changes in the curriculum. While certain self-contained changes could be made (such as the abolishment of Grade 8 exams), endemic reforms appear to have been largely out of reach of the Department at this time (Dimension C).

The curriculum change was, to a great extent, treated in a traditional, top-down process throughout. Although made in response to local pressure, solutions were sought out from a foreign, elite source (solely from the Hadow Report) rather than from any local stakeholders (teachers, parents, etc). The resulting programme appears to have then been disseminated to the teachers *fete accompli* rather than implemented collaboratively (Dimensions F & G). Furthermore, while espousing the benefits of unity, certain traditional "disciplines" were still

viewed by the Department as having great merit when organizing the curriculum. Therefore, while the newly adopted concepts of adolescence and pedagogy were the deciding factors in driving the Department in their choice of integration approaches (Dimension E), its traditional perceptions of centralized bureaucracy and disciplinary education did much to colour its execution of these reforms.

2. "Fusion" approach a successful amalgam of the inherently conflicting philosophies

One of the Hadow Report's major findings was that adolescents are characteristically confused by subject divisions (Dimension D), abstract concepts and too much content (Dimension A). The report recommends the drastic reduction of separate subjects, based on the teacher's discretion. In fact, it goes as far as recommending that teachers view the curriculum as a whole, with subject areas melting away (Dimension B). As examples, it suggested that teachers themselves may want to fuse a certain number of subjects to simplify the curriculum. While the report recommended the creation of large subject areas like "English", "Social Studies", "Mathematics", and "Science", it leaves the choice up to the individual teacher. The Department appears to have accepted this premise in theory. However, it could not bring itself to allow schools or teachers the freedom to dictate the organization of the curriculum in reality. As a compromise, therefore, it adapted the aforementioned "fused" subjects from the report and mandated that all classrooms should follow this approach to education. This gave teachers more leeway in the classroom within wide subject boundaries, while allaying the Department's fears in regards to accountability. Therefore, while it must be acknowledged that the use of this approach was a great step (in the long run) in freeing up the teachers from the previous 15 separate courses, it fell short in the Hadow's report original reason for it – to empower the teacher and student. Time has borne out the validity of this approach – 3 of the 4 "fused" subject did not splintered again for the next 60 years.

3. Manual Skills Harmonized

It appears that the recommendation the Department took most seriously from the Report was the importance it placed on Manual Work. For the adolescent mind, the report argued, practical problems are the most efficient steppingstones to higher, abstract thought. Holding this premise as true, the departmental committee apparently resolved that concrete examples and problem solving must become the highest priority of the curriculum. To ensure that this was inculcated in the students, the Department mandated that "practical intelligence and work" should be harmonized throughout every subject area and included as essential tasks whether the course was English, Math or Science. In this instance, it accepted "harmonization" as the necessary approach because of the perceived symbiotic relationship between concrete, abstract and individual skills (Dimension E).

4. Social Skills Segregated

The Report recommended that the curriculum should include the defining and understanding of adolescents' own social relationships (Dimension A), as this will interest them greatly at this stage of their lives (Dimension D). It also saw the importance of teaching social continuity as a necessary function of education (Dimension B). However, in reading this over, it appears that the Department interpreted the learning of good citizenship as a proper end in itself, rather than a steppingstone to something else (like manual skills had been). Therefore, to them, harmonization was not the answer. Rather they chose the more traditional means of education, making it a separate subject for study (albeit the fused subject of Social Studies). Active learning of social skills was also relegated to a separate part of the day - "Corporate Activities" (also known as after-school or extra-curricular Activities).

5. Vague Correlation a result of a "fuzzy" view of subject-centred connections

Lastly, the Programme repeatedly makes several suggestions that certain common areas between subject areas should be noted. However, these ideas remain largely undeveloped (i.e., a

correlation is mentioned between Math and Science in one subject, but not the other). This uncomfortable, almost incidental approach seems to stem from a loggerhead created by two opposing philosophies. On the one side, the Department tries to follow the Hadow Report's recommendation that the curriculum should be linked as a whole to combat isolation, while on the other it tries to follow its traditional assumption that content and ideas should be severely segregated to promote efficiency and clarity. In this case, this stalemate has created a rather lack-lustre approach that may or may not have been used by the teachers.

The first Ontario curriculum to espouse integration as an educational approach does evince certain characteristics that illustrate the originality of this concept. Where the preamble is very definite about the progressive, practical and child-centred objectives of the designers, these principles are not systematically carried into each subject-area description (see analysis of profile E). Furthermore, certain recommendations for integration that appear in one subject area are not reinforced in the others: Art, English, Religion are each described as "beyond subject boundaries", but there is only one passing mention of the importance of reading and comprehension skills in Mathematics. There is also some derailment of basic principles. Social Skills and Individual Development are balanced carefully in the preamble and in most subject area descriptions, but in Music, Individual Development fails to receive even implicit mention. Aside from such minor inconsistencies in the document, the Programme presents a carefully planned and coherent blueprint for substantial educational change. Its arguments follow a logical course and are substantiated by references to child psychology, philosophy, and educational methodology. Curriculum integration is not the goal of this Programme. Rather, it is the most viable tool the designers could envision for achieving their objectives.

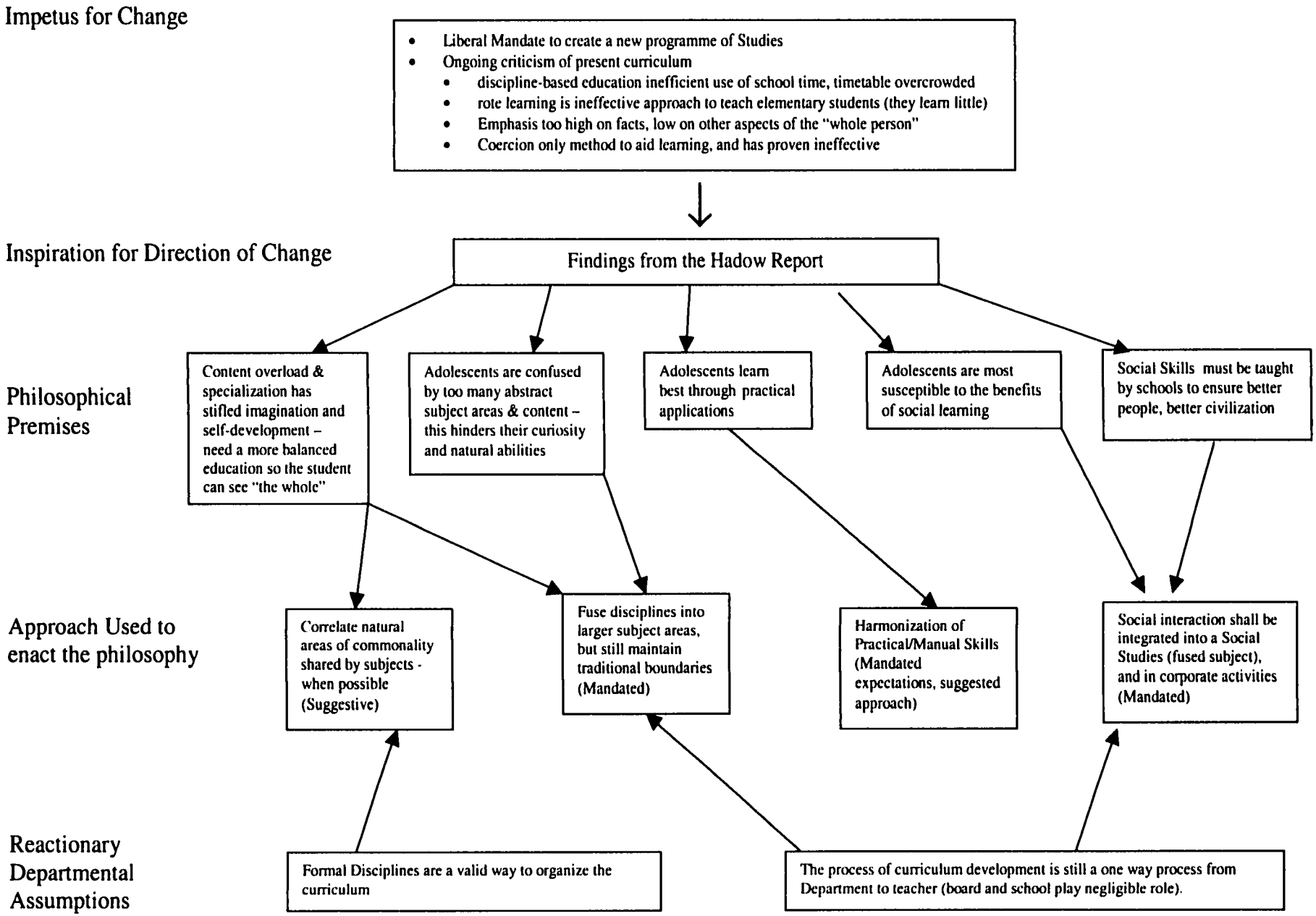

Diagram 1. Assumptions Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 2

"The Wartime Blue Book"

1942-1948

Context of the 1942-1948 Curriculum

The creators of the 1938 Programme had expected that the document would be disseminated to a largely young, well-educated generation of teachers who knew the scholarship surrounding its progressive spirit, and could apply the various approaches needed to reach its goals.[1] The older teachers, it was expected, would simply retire. However, this belief was short-lived, as the declaration of War threw this pattern into disarray. War demanded military service from almost all young males (as well as a sizeable chunk of young females) in the profession, to be replaced by significantly older teachers, brought out of retirement (Stamp, 1982). Throughout these years, therefore, it was not surprising to find numerous archival records displaying teachers' apparent ignorance of (or steadfast refusal to teach) any approaches to education that were not tried-and-true.[2] Evidently, the new program was not to be tried under the most favourable conditions or even by the most informed practitioners.

Even without the strains of war, however, the implementation of a "progressive" format had proven difficult to all who had attempted it in North America. While at the policy level, it appeared to permeate all facets of education (at least according to Lawrence Cremin, 1962), there seemed to be considerably more discord at the school level as to its uses. In Alberta "while the ideas and terminology [of progressive education] gained popularity, they did not gain a strong hold in the schools" (Wilson, 1970, p. 378). In fact, just as the movement achieved its most strength in Canada during the late 1930s, it was in the process of rapidly losing popularity in the rest of the world (Kach et al, 1986, p. 62). Patterson argued that this disillusionment was due to a generally poor realization of "progressive" ideals:

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[1] The teacher population had steadily grown in the pre-war years and, more importantly, they had been subjected to more rigorous training and qualifications (See the Minister's Annual Report for 1937, p. 2). Gidney (1999) points to the "progressive" ideas that were taught by many teachers at Ontario Normal Schools (p. 32).

[2] Examples of this lasted throughout the war years. See "Correspondence to the Superintendent of Elementary Education" RG-2, P-3, Box 244, File 4-815/816, Ontario Archives.

> Unfortunately in all provinces practicing teachers were poorly prepared for the changes. Teachers expressed an urgent need for help as soon as the new curricula and methodology were introduced. Generally, the reforms were the work of an educational elite within the departments of education and the normal schools. Practicing teachers were ill-prepared for the changes which were thrust upon them, demonstrating the need for a program of education and popularization. (p. 73)

> If the reformers are to be faulted, the criticism should be directed at their failure to adequately educate the practitioners. Their efforts resulted in confusion, misunderstanding and, of course, misapplication. The fault was not necessarily in what was conceived nor even in what was formally introduced, but in the failure to orient and convert the practitioners who were key figures in determining the ultimate success or failure of the venture. (p. 75)

By 1942, it had become apparent to the Department that the new Programme was untenable in its present state, and a revision of the 1938 Programme was created. First, accommodation had to be made (due to the myriad of complaints from teachers) for guidance concerning approaches to reach the new goals of education. It did so by adding a section entitled "The Enterprise Method" that detailed the progressive approach.[3] Second, in response to media demands for assurances that all efforts were being made to win the war and maintain the "Canadian" way of life, changes were included in the 1942 revision that reflected the new atmosphere of patriotism.

Shortly after this new programme was disseminated, the Ontario Liberals fell from power, to be replaced by a minority Conservative government in August 1943. Quick to realize the tenuousness of a minority position[4], the new premier, Col. George A. Drew decided on another

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[3] First introduced by the progressive scholar W.H. Kilpatrick (1918; 1930, 1934), the "activity method" or "project method" was designed to change the pupil from passive recipient of information, to an active participant in co-operatively solving a problem in which he himself was interested. It required a change of role for the teacher as well, demanding more flexibility of timetables and classroom facilities. It also called for group work, oral reports, individual research, and critical thinking. By the mid-1930s, this method was adopted by Britain and the western provinces under the title "the Enterprise Method". It was no doubt added to the new Ontario curriculum in 1942 with the hopes of promoting an increased spirit of democracy.

[4] Being from a military background (he left army in 1918 but continued to hold the rank of Lieutenant-Colonel in the militia), Drew knew the hazards of a weak government during war-time. He explicitly states this several times in his official addresses and unpublished memoires (see *Drew Papers*, Ontario Archives).

vote that would definitively decide who would rule Ontario for the next four years. Of great importance to Drew's platform was the maintenance and prosperity of education, one of "the main pillars of Ontario society" ("Addresses, 1943-1944", File 146 (3b), *Drew Papers*, Ontario Archives). To Drew, it was what stood between a victorious country and a defeated country. So strongly did he feel about this that he took on the dual portfolio of Premier and Minister of Education. Clearly shown in their "Twenty-Two Point Plan" (1943) for re-election, the Conservatives saw certain ills in Ontario society and, if elected, the concrete steps they would take to amend them. Chief among them was a promise to reform the educational system which, the plan said, was lagging behind that of the rest of the Western world:

> Our educational system will be completely revised so that every child in this Province will have an opportunity to be educated to the full extent of their mental capacity, no matter where they live or what the financial circumstances of their parents may be. Vocational training will be made a more important part of the schoolwork so that children may be prepared to earn a living by practical vocational instruction. The important place of our teachers in each community will be fully recognized. (p. 5)

Based partly on these promises, Drew's administration was elected back into office with a substantial majority. For the remainder of his stay as Minister of Education, Drew continually maintained in his speeches that it was the school's responsibility (along with the family and church) to instill certain strong beliefs in the young. These primarily included the inculcation of patriotism, Christian principles, self-discipline, the nuclear family, ethical values for freedom and democracy, as well as basic reading and mathematical skills.[5]

A sizeable discrepancy remained between his rhetoric of reform, however, and the actual changes that he made to the curriculum. While Drew did manage to include certain add-on courses for "Religious Education" and "Cadet Training" to the 1942 Programme, he made no other changes throughout his 6-year tenure as Minister. This could be due to two main reasons:

1. By the time Drew's government was solidly in place in 1944, the two Programmes of Study (1938 & 1942) had become fairly entrenched in the educational community. They had set a tone, pace and focus which seemed to be most palatable to an administration caught within the strains of an escalating and costly war effort. To insert revolutionary changes would have been to send in unneeded chaos during a time of great disruption.

2. Drew and the Department supporting him (with many bureaucrats who had a hand in the creation of the original documents) appeared to have very little disagreement with the bulk of the material. It stressed democracy, Christian principles, an adherence to the British Empire, basic skills, etc. Despite their attacks against poor education in Ontario in general, the Conservatives appeared to have no argument with the major premises of what were being taught and the methods recommended by the revised 1942 Programme.

Promises had to be kept, however. To fulfill the government's electoral pledge for reform, Drew created a Royal Commission on Education through an Order-in-Council. Chaired by Mr. Justice John Andrew Hope and consisting of 21 commissioners, it was to be an all-encompassing study of the Ontario school system with recommendations on how the government should clarify its vision of what shape post-war education should take. Of primary concern were the issues of universal education, improved facilities, vocational training, and curriculum design.[6] Most importantly for Drew, it allowed him to take a promissory approach in his role as Minister of Education for the rest of his term. For the next four years he was able to speak with conviction that solid educational reform based on the Hope Commission's findings would be undertaken – ***when*** the Report was submitted (see vol. 308, file 267 (3b), *Drew Papers*, Ontario Archives). Until that time, the Department undertook only cosmetic curriculum policy changes (such as

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[5] Examples of his educational views can be seen in his statements to the Legislature ("Addresses", File 146), in his radio broadcasts ("Addresses, 1943-1944", file 146 (3b), file 314 (3b), and in his speeches to various institutes (Files 249-271) in *Drew Papers*, Ontario Archives.

[6] The reasons for striking the commission are outlined in great detail by the Report it submitted in 1950 (see especially pp. 23-33).

textbook replacements and content updates). In other words, Drew maintained a strict policy of non-policy (see Bachrach & Baratz, 1962; Boyd, 1978).[7]

Features of the Period:

There are two sources used during this period. The first is the Programme of Studies for Grades 7 and 8 of the Public and Separate Schools (1942), and should be viewed as merely a revision of the previous 1938 document rather than as a separate initiative. It maintains most of the features of the previous programme, and in fact, does not change much of the wording in many sections (such as in the subject areas and corporate activities). Only the introductory section (8 pages) is significantly changed, while a new section entitled "The Enterprise Method" is added, showing the new spirit of pedagogy from the previous document. Like the previous document, these sections are followed by more detailed descriptions of the 7 obligatory and 4 optional subjects (Manual Training being a new addition) that were to be offered at all public and separate schools within the Ontario educational system. The revisions, done by Stanley Watson himself, are said to derive from inspector's observations and teacher's comments. The second source, the Programme for Religious Education in Public Schools (1944), can also be attributed almost solely to Watson. Recalled from Ottawa in the Spring of 1944, he was given the task by the Director of Education to create the document for September distribution. Basing the programme heavily on the Cambridgeshire Syllabus (1940), he freely admitted to the novelty of the exercise, and the hastiness in which it was undertaken.[8]

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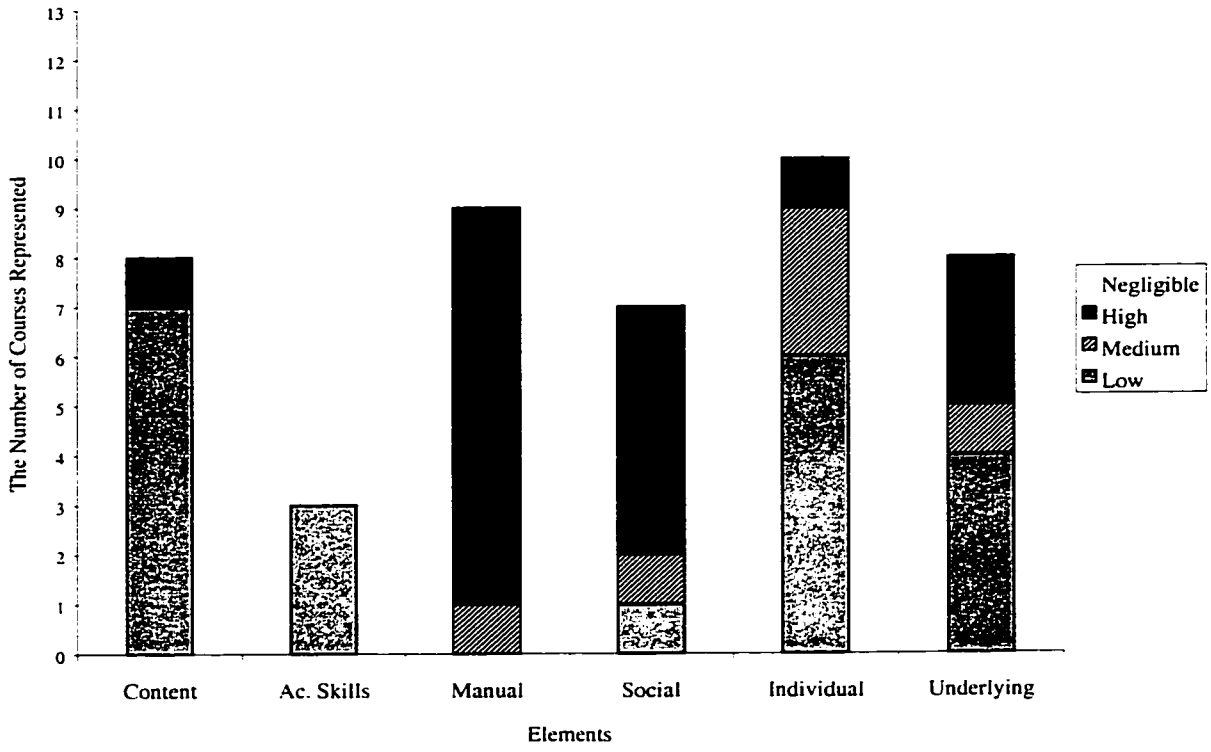
[7] In fact, the Grade 1-6 Programme would remain solidly entrenched until the late 1960s while grades 7-8 awaited the ascension of a new administration.

[8] In reporting to the Hope Commission on December 18, 1946, Watson outlined the specifics of the creation of this curriculum: "I came into the thing cold, and the books were entirely new to me. I made a study of them ... and I arranged topics to form a tentative course of study to be submitted to a number of church leaders. One week after I had that in form to send on to religious leaders ... then began the preparation of the manual whose proofs were sent by July 24 to 35 to 40 religious leaders. The programme as finally amended was presented to the Minister on the 17 of August. ... That went to press the next day. It was distributed without changes. (Proceedings, Witness No. 452, *Briefs to Royal Commission Vol. 2*, pp. 5258-5259, Ontario Archives).

Analysis of Dimension A: Elements Used During Integration

Chart 2.1 - Dimension A (The Importance of Elements used during Integration)



Any changes in the importance and tenor of the Forms of Integration for this period must be seen as merely revisions to the 1938 programme, changed to reflect the bellicose atmosphere of the time. Practically no changes were made in the first three forms of Content, Academic Processes and Manual Skills beyond slight modifications. The only dramatic change that took place was the unbalancing of the earlier "Social Individualism." Individual development was greatly de-emphasized, the vacuum replaced with a heavier accent on social skills training and the adoption of a new set of underlying principles stressing "sacrifice," "responsibility," and "respect" for the welfare of society. This change in mentality is understandable for the time - Individualism was felt to lead to dissention, which in turn could lead to defeat.

Analysis of Dimension B: Objectives of Integration

Student-Centred Integration Reinforced

Student interest still remains the primary reason for the integration of the curriculum. In fact, the new preamble and Enterprise sections do much to boost its importance. The authors clearly lay out their philosophy, obviously highly influenced by the Progressive movement:

> Learning takes place most efficiently when the interest of the learner is aroused. Interest (which must not be construed to mean "diversion" or "amusement") is the foundation of learning. When interest becomes attached to an imagined future accomplishment and the will to achieve it is aroused, a purpose results. When the pupil's actions are directed by a continuing purpose, external motivation becomes less necessary. The immediate and transitory interests of pupils should be transformed into enduring purposes. Learning is more efficient and takes place with the greatest economy of time and effort when pursued in connection with a worth-while purpose and then related to a real situation. (2A-15)

This sentiment is repeated throughout the subject areas. Social Studies (2A-45, 2A-50), English (2A-53), Mathematics (2A-60, 2A-61, 2A-62), Art (2A-84, 2A-85, 2A-89), Crafts (2A-94), Home Economics (2A-101), Religious education (2B-18, 2B-23) - all describe the arousal of student interest as the starting point for the curriculum. They are also emphatic that students will not be interested by passive means but through active participation in their own learning: participating in informally-planned activities such as dramatization (2B-19), experimentation (2A-70, 2A-71, 2A-71, 2A-76), or self-appraisal of their work (2A-21, 2A-37, 2A-38). To this end, the programme recommends that adult strictures must be sacrificed to allow a certain amount of freedom to the students so that they may organize themselves and work in an unsupervised way. Goals must be accessible to students and there must be lax time-limits on them in getting the job done to prevent strain on the child's mental health (2A-7, 2A-77, 2A-94). This can be accomplished through the use of the Enterprise Method:

> Children engaged on an enterprise may not know what "subject" they are studying nor in what "period" according to the time-table. It matters little to the learners whether an interesting item of knowledge or experience is properly called geography, history, dramatization, or literature; the important thing to them as

> learners is that it is interesting, and is useful for them in the life they are living as boys and girls (2A-25).

The authors argue that this is a "natural way of learning" (2A-22, 2A-23) because it teaches students how to "learn to do by doing" (2A-24).

Subject Unity Remains a Low Priority

Subjects are included in the programme, therefore, not for the students' sake, but to provide some structure for teachers. In fact, it states that once teachers becomes more adept at working with the enterprise method, they will be able to keep the subject lines in their heads, invisibly weave them together, and adapt it to the students' way of learning. Eventually, it is hoped that students will learn how to tap into the many subject areas to aid a project - writing dialogue and invitations, creating costumes and scenery, calculating the cost of materials, learning songs and dances - yet remain unaware of the disciplinary divisions (2A-25). This will help them think in terms of unified wholes rather than isolated sub-divisions.

While the Enterprise Section implicitly advocates the destruction of all subject boundaries, the broad subject areas described in period 1 are retained in this programme.[9] As well, integration is again mentioned frequently (if in passing) by the authors as a way of helping reduce overlap, timetable complexity and increase efficiency and clarity (2A-70, 2A-79, 2A-95). This is seen especially in Science (2A-71) and Health (2A-78, 2A-82), while teachers are encouraged to combine classes for Music, Art, Crafts, and for many of the activities outlined under English. (2A-17).

Manual Training, although doing much to isolate itself from all other subjects through its specialized course of study, makes an appeal to integration as a way of "fitting in" to the curriculum and to show its importance to the teacher. It states that:

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[9] Only Social Studies is mentioned as a fusion of previously separated subjects, however (2A-47).

> It is essential that the classroom teacher and the Manual Training teacher recognize that Manual Training has an educational as well as a practical value. The classroom teacher should be familiar with the facilities of the shop, and the shop teacher should be in touch with the work of the grades. Manual Training will only achieve the best results if the cooperation between the general work of the school and the Manual Training room is of the closest possible kind. (2A-99)

Similarly, the Religious Programme maintains that whether spiritual, intellectual or physical, "education is one and indivisible" (2B-10), thereby affirming its place in the curriculum. More specifically, it draws connections between religious education with other subjects, especially history, geography, and English to show its importance (2B-17, 2B-21, 2B-25).

Social Continuity Buoyed by Wartime Activity

In a meteoric rise from the previous period, the creation of the "socially satisfactory personality" (2A-4, 2A-5, 2A-10) with socially valuable skills (2A-8, 2A-14, 2A-62) becomes an overwhelming emphasis, integrated into almost all aspects of the curriculum. The programme's explicit purpose is threefold. First, it states that students learning cooperation with others will help society achieve common goals and peace (2A-3, 2A-4, 2A-23, 2A-48, 2A-51, 2A-83, 2A-89, 2A-104). Second, for a society to prosper, it is necessary for students to be knowledgeable of their rights, duties and responsibilities (2A-5, 2A-9, 2A-12, 2A-13, 2A-28, 2A-62, 2A-76, 2A-44, 2A-45, 2A-47, 2A-51, 2A-52, 2A-83, 2A-101, 2A-104, 2B-6, 2B-9, 2B-11, 2B-12, 2B-29). Last, for the present political system presently in place (i.e. the commonwealth) to flourish, it is necessary for students to learn respect for it (2A-48, 2A-52, 2A-68, 2A-69), and the "privileges and the property of others" given to them by the system (2A-4).

It is quite obvious by the tone taken by the programme that this aspect of the curriculum was written during a time when social continuity was greatly threatened. Indeed, in 1942 the Allied powers were at a nadir and their whole way of life seemed under attack.

No Political Change Promoted

There is no indication in the text that any attempt is being made to try to change society through the education of the young. Rather, there is a desire to reinforce the "Canadian" way of life.

Analysis of Dimension C: Loci of Integration

Clearly, the 1942 programme must be seen merely as a revision of the previous guideline, not as a revolutionary document. Similarly, the structure of the Ontario school system and the integration process have not greatly changed from the last period. Most of the amendments made, however, can be attributed to the Department's response to teacher complaints (as related by inspectors in the field). It is keeping with government protocol that the Department did not return to these local educators for suggestions as to how to solve their problems. Rather, it sought out British sources, yet again, to find a solution. "The Enterprise Method" was taken quite precisely from a British progressive theory (not unlike the Hadow Report), and distributed to the teachers as the correct way to educate students. To the authors' credit, however, teachers and students were given much leeway within the approach. Schools and school boards are again rarely mentioned and play insignificant roles in the integration process.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

According to the 1942 Programme, the Department's view of the Grade 7-8 years' relationship with the integration process has not significantly changed from Period 1.

Analysis of Dimension E: Integration Methods/Approaches

Primary Forms of Integration

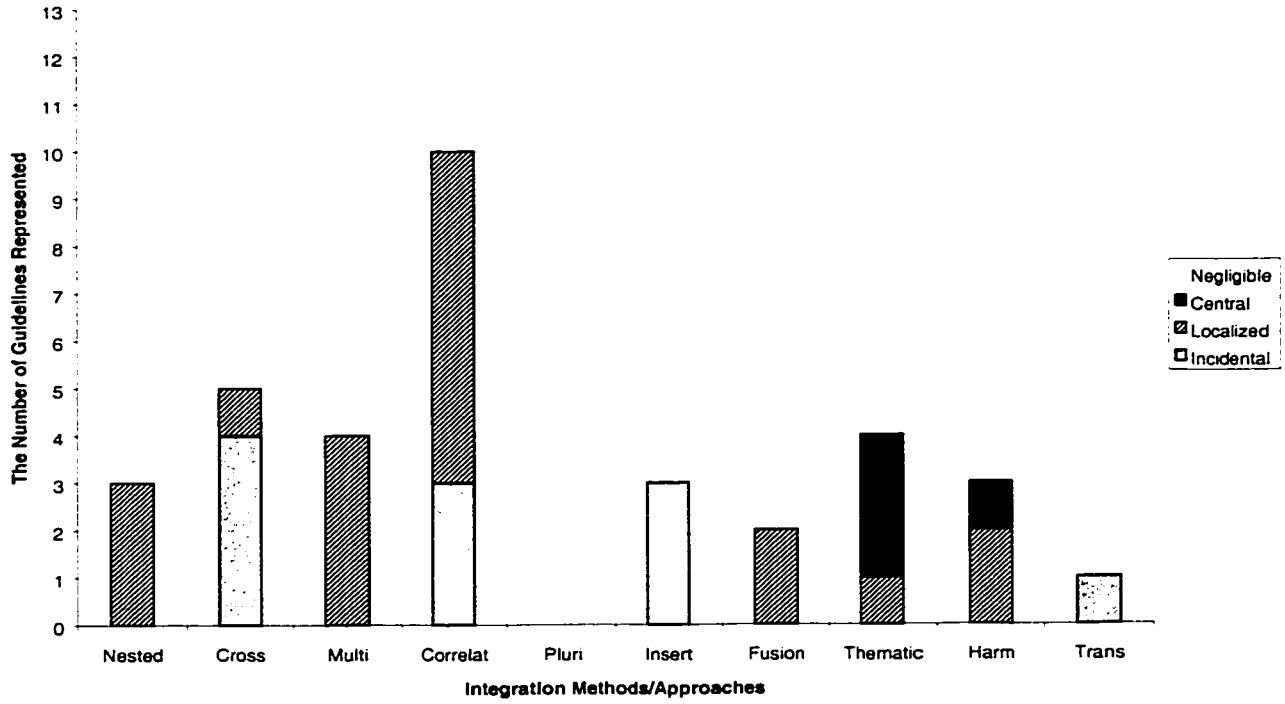
Of greatest impact on the new progamme, in regards to integration, is the Department's introduction of "the Enterprise Method". Although it is explicitly mentioned only in a separate section (see 2A-20 to 2A-43), it is described in great detail and appears to fall under the ***Thematic Approach*** category for Dimension E. It is broken into three phases: the planning stage undertaken by the teacher and to some extent the students who determine the parameters of a chosen project to undertake (2A-26, 2A-31, 2A-32); the work stage done by the students to solve the problem (2A-26, 2A-27, 2A-33, 2A-34); and the culmination activity that brings their work to an end, like a production or a concrete object (2A-30 to 2A-33). The time students have to do this is also judged by them - it does not go by bells, but by the length of their visible interest (2A-25) - it can go for minutes, hours, days or months. From the highly child-centred nature that the Enterprise Method takes, it can be inferred that the Department is also making fairly strong leanings towards the ***Transdisciplinary Approach,*** as well. However, beyond this theoretical rhetoric, the approach is only hinted at in all other subject areas. Specific projects and problems are mentioned individually throughout, but the spirit of the Enterprise Method (most specifically, its child-centred aspect) are left undeveloped. Students are given some limited freedom to pursue interests, but the time-table is too well-guarded and bounded to give them much leeway.

Also suffering from a lack of elaboration are the strong underlying principles outlined in Dimension A. The authors specifically state that these should imbue the curriculum - that they should be included in each specific area and that they should not be taught in a specific time period. It is inferred, therefore that these ethics and values should be ***harmonized*** throughout the curriculum, that a definite plan should be created beforehand by designers and teachers to include these values in. However, as can be seen from the chart, while it is emphatically discussed in the preamble, this approach is stretched a little thin in places across the programme.

Secondary/Localized and Incidental Forms of Integration

All other approaches appear to be simply continuations from the previous programme. Again, ***correlation*** plays an important, if unorganized form of integration in this period. The programme puts forward virtually the same general recommendations to teachers - none are prescribed, and it is unknown whether any of these were acted upon. While it is obvious that English and Mathematics do not change from the previous curriculum, no mention is made of them as being a ***fusion*** of any sub-dimensions. Social Studies and Science, however, state in passing that they are a combination course of smaller subjects.

Chart 2.2 - Dimension E (The Importance of Integration Methods/Approaches)



Again, ***multidisciplinary*** methods are generally encouraged, but not exploited to any noticeable degree. The programme mentions that teachers of different subjects should meet to share their ideas (2A-18), but only vaguely followed up in Manual training, and a repeat of eurythmics. Beyond this, there is some mention of ***cross-disciplinary*** activity, namely "religious

history" (2B-25) and "scientific drawing" (2A-87), and ***Insertion*** (2A-51, 2A-58, 2A-68. 2A-69) but barely worth mentioning. The ***Nested approach*** is vaguely broached, in that teachers are told by the designers of the programme that they should organize their courses in some incremental way. But, this remains very rudimentary.

Analysis of Dimensions F & G: Implementing Curriculum Integration

Remaining very much within the same bureaucratic structure of the previous period, the Department does make some revisions, obviously based on teachers' complaints. The new "Enterprises" section is perhaps the most friendly towards the integration process – it makes a great attempt to counteract subject attachment, by subjugating subject lines to a specific project (2A-20, 2A-23 to 2A-32, 2A-37 to 2A-43). Furthermore, the Enterprise is most radical in its attempt to include much student control of the learning process, and acknowledges that the changes required for implementation will take time (2A-40, 2A-44d). In the abstract, these sentiments are reiterated throughout the programme (2A-7, 2A-8, 2A-57, 2A-71, 2A-73, 2A-77, 2A-78, 2B-9, 2B-17, 2B-18). However, certain concrete actions taken by the committee make this an unfeasible prospect. Few connections are drawn between subject areas, and the newly added courses of Religion and Manual Training both require specialists to perform the job (2A-96, 2B-3, 2B-4, 2B-16, 2B-17).

Beyond a doubt, both the Department and the teachers of the time knew that the additions to the curriculum were going to mean an additional load to the 1938 revolutionary programme. This is recognized especially in connection with the Enterprise (2A-40, 2A-41).[10] Religion,

[10] The document clearly states that this approach was not a replacement for more "familiar" teaching methods, but a mandatory supplement (2A-29). At this time, the Department received many responses from teachers voicing their frustration over the increased work load and unfeasibility of the new programme (see "Complaints to the Superintendent of Elementary Education" RG-2, P-3, Box 244, File 4-815/816, Ontario Archives).

Manual Arts and civics, as well as new content are also added (2A-11 to 2A-14, 2A-96 to 2A-100, 2B). However, nothing is removed from the programme. As before, it was also expected that teachers would implement this within a one-year time limit. The suggestions the Department gives to counteract this problem are meager. They recommend teachers rearrange or double-up on topics so that they make efficient use of time, and make coursework it adaptable to fit the allotted space (2A-16, 2A-71, 2A-72, 2A-73, 2A-78, 2B-30, 2B-36).

For the first time, the Department mentions professional development for the teachers. However, it maintains the belief that this is the bailiwick of the teachers themselves. It was expected that they would take responsibility to hold discussion groups (2A-18) and to search out sources of enlightenment (2A-19, 2A-43, 2A-65, 2B-21). Occasionally, it mentions that teachers of different subjects should meet and discuss common linkages (2A-99), but curiously enough, the Department discourages teachers from sitting in other classes, stating that it would be impractical (2A-43).

Testing is the one area where vast changes had been made to the implementation of the curriculum. By this time formal examinations had completely given way to local testing. Alternative assessments were now recommended to test for pupils' capacities (2A-7, 2A-50, 2A-85), while the Enterprise section promoted class collaboration in the culmination phase of a project as a way of observing the student's capabilities (2A-37, 2A-38, 2A-39). This is taken one step further in Religious Instruction where no formal testing whatsoever was allowed (2B-14).

Certain aspects remain unchanged from the previous period. Schools and boards are, on the whole, ignored in the implementation process, the onus being left on individual teachers. This also holds true for parents and the community, who's roles are left abstract (2A-9, 2A-10, 2A-14, 2B-12), except for a few miscellaneous activities (2A-44g, 2A-95, 2A-100).

Overall Remarks on Period 2

The integration process of period 2 contains certain inconsistent qualities throughout the curriculum documents. These appear to be caused by the Department's changing perception with new, outside influences while trying to "stay the course" from the previous period. Most specifically, this study makes the following inferences (seen graphically in diagram 2).

1. No Radical Changes in Philosophy/Governmental Structure

The Departmental structure had not changed significantly from Period 1, remaining quite centralized (except for its abolishment of standardized testing). In fact, many of the members who had created the 1938 programme sat at the committee to revise it in 1942.[11] It can be little surprise, therefore, that the new document maintained much of the content and tone that had been established in 1938. The committee retained all the discrete discipline areas it had created (including the 4 fused subjects), as well as the fuzzy correlation approach (see Period 1 for reasons). Therefore, while this is technically a "revised" programme, many areas of the document differ little from the original. Thus the curriculum integration initiated in 1938 is fully entrenched in the 1942 curriculum and even more highly developed. The four outstanding alterations that were made can be seen as "add-ons" rather than any attempt at endemic change: a new preamble, the introduction of the "Enterprise Method" section, and the creation of separate classes for "Manual Training and "Religious Instruction". All appear to have come about due to the bellicose atmosphere of the time rather than a desire on the part of the committee.

2. The Enterprise - an Elite Response to Broad-based Complaints

It may certainly be inferred from the changes made that one of the major complaints received from teachers and inspectors was that the original document failed to give enough particulars about the innovation. The first response to teachers' complaints was to follow a

[11] Except, of course, Thorton Mustard who had died the previous year.

procedure resembling that of the previous period – consultation with scholarly sources. "The Enterprise Method" section is almost wholly taken from the work of Drs. Donalda Dickie and Freeman Macomber. This should be seen as a formalization and extension of the Department's approach to curriculum integration in an effort to match with its conception of the philosophy of education created in the earlier period. From the poorly defined "practical tasks" of 1938, it has turned to the more established Project Method, the "Enterprise", as a means of effecting natural, student-driven, "seamless" instruction. While "practical work" still plays a part, subject integration is more directed towards inculcation of social skills. Furthermore, the Enterprise formalizes practical work making it's requirements clearer to the teacher. This is emphasized by the Programme's detailed 6 pages of description devoted to the new approach.

3. Bellicose Spirit Inculcated through Weak Harmonization

The government's response to the crisis was that not enough had been done to encourage people to "pull together" to win. Worries about industrialism and the fully-rounded individual all but disappeared by this period, therefore, to be replaced by a reinforcement of social skills, social responsibilities, and traditional values. The committee appears to include them randomly throughout the document, placing them where it feels the greatest impact will occur – the social studies and the preamble. This is obviously not a driving force for the committee, as can been seen by the weak harmonization shown throughout, brought about solely by the crisis at the time.

4. Separate Periods taken more Seriously

The "Manual Training" and "Religious Instruction" courses are given special periods in the timetable, in a special room, by a specialized teacher. It can be inferred that the Department felt that these courses were far too important to be scattered across the curriculum. Drew, in fact, criticized the way religion had been taught in the past and through his sheer will had brought the separate course about through government edict. Surely, the government concluded, during this period, that only a clearly defined period on the timetable would ensure accountability that the

subject would be taught. While some correlation is included – the more intense forms of integration like fusion could not be trusted. Manual Training, seen as advanced craftwork, is relatively uncoordinated with other subjects, and represents a first move into vocational training.

5. Cut and Paste Programme leads to some Integration inconsistencies

It is obvious that the committee, believing in the sound reasoning of the 1938 programme, chose to keep most of its sections, cut others, and inserted new material when they thought it was necessary. While it does not lead to wild inconsistencies, there is a lack of uniform reinforcement of integration approaches across the document. For instance, the new Enterprise section is extremely strong in its own defense, but is not heard from again. Projects are, in fact, used not that often elsewhere (except for Science experiments), leaving the approach quite disembodied. Lastly, while the Department's philosophy of education (child-centred, teacher professionalism) and integration approach (classroom, teacher-student directed projects) align, the method the Department enacts to implement these changes remains solidly centralized and unidirectional. With no field-testing or feedback, the Enterprise became the mandated approach to be used by all teachers. This would inevitably lead to a mixed reaction from the educational community - some would embrace it, other fiercely attacked the bind that they were placed in (see Stamp, 1982).

It must be acknowledged, however, that the 1942 curriculum provides considerably more direction to teachers. It breaks new ground in acknowledging that a degree of professional development, concrete teaching aids and resources may assist implementation. These include library facilities and suggested readings for teachers. The Department also promotes the creation of *ad hoc* discussion groups. In short, while the 1942 Programme was still a fairly prescribed, centralized document, the Department went much further than the previous period in actively soliciting teacher support at the local level, providing some assistance for effective implementation, and allowing considerable freedom within the integration method.

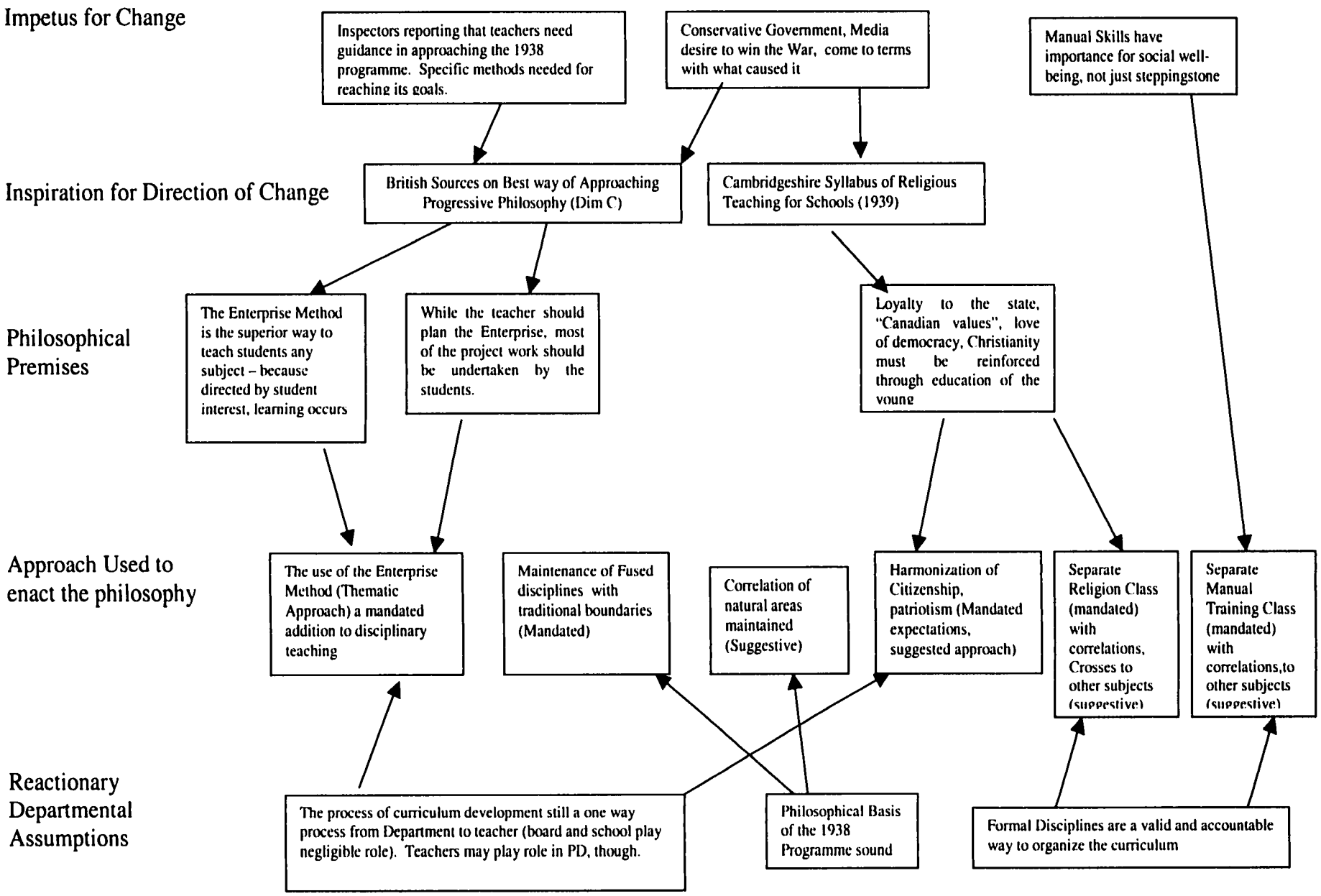


Diagram 2 - Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 3

"Curriculum I:1"

1949-1959

Context of the 1949-1959 Curriculum

The Porter Interlude (1949-1951)

To the end of his term as Minister of Education, Drew managed to "keep a lid" on any seminal changes to curriculum design and implementation. However, even he had to admit that protests were "bubbling up" in favour of a reformed, decentralised public school system. Most vociferous were media sources sympathetic to teachers and school boards (see Fleming, 1974; Goulson, 1966; Pullen, 1955). Criticised as unresponsive to local issues, lacking in vision, and unaccountable to the public in general, Drew had a progressively harder time defending his Department's non-actions as the wait for the Hope Commission findings dragged on, year after year. Inevitably, the deadlock was broken in late 1948 with the threat of an election loss looming in front of the Conservatives. To lead the party unencumbered, Drew gave up his dual portfolio and parachuted a new member of his cabinet, Dana Porter into the position of Minister of Education.

The new Minister had two qualities that virtually guaranteed changes to the curriculum within a year. First, Porter had a reputation for being a fairly ambitious politico, eager to make a name for himself as a reformer. Second, having had little previous contact with the field of education, and given double duty within the cabinet[1], he was forced to rely heavily on the departmental bureaucracy for support, direction and day-to-day tasks. Within an instant, therefore, unofficial policy-making power shifted down the Department structure to the recently resurrected post of Director of Education, changing it's incumbent, John G. Althouse, from a position of peon to informal commander-in-chief.[2] And this particular man, it so happened, had

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[1] First elected to the provincial legislature in 1943, Porter served in a great variety of portfolios throughout his career – Minister of Planning and Development (1944-1948), Minister of Education (1948-1951), Attorney General (1949-1955), and ended his career as Chief Justice of Ontario (1958).

[2] He had originally been hand-picked by Drew for political reasons - as a member of the educational elite (principal of the Ontario College of Education), Althouse was expected to act as a liaison with this group and

dedicated his life to the decentralization of the school system.

Initially, Porter maintained Drew's stance that all answers would be given to the educational community by the Hope Commission. However, after his first few months, with the continued absence of a report from the slow and costly venture, Porter quickly realised that his honeymoon period with the public would soon be over. Rumours came in daily that teachers throughout the province were taking curriculum matters into their own hands, forming informal groups to create their own revised guidelines, implementation approaches and professional development.[3] To Althouse, this was something to be harnessed as a means to achieving a decentralized, humanist educational system. To Porter, this indicated the stirrings of an educational revolution and, Hope Report or not, he wished to become known as the lightning rod for reform (Fleming, 1972d, p. 89)

Drawn up by Althouse and the Department, Porter announced a number of extensive changes to the educational system, dubbed "The Porter Plan" at an address on November 3, 1949.[4] The plan contained three major elements that pertained to the Grade 7-8 curriculum. First, Porter announced that the 13 grades would be reorganised into 4 divisions of Primary (1-3), Junior (4-6), Intermediate (7-10), and Senior (11-13). He maintained that this would break the primary/secondary deadlock, and go a long way in easing the students through the levels. Second, the Intermediate Division curriculum would be changed to allow a more "rounded-out" education so that students leaving school at the age of 16 would "feel a sense of achievement

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respond to their fears. The role of "mouthpiece" proved difficult, however, as he found himself increasingly hemmed in by the Department's centralized bureaucracy. Fighting a continual uphill battle under the Drew administration, he undertook to decentralize the system through changes allowed within his jurisdiction. He advocated board-related inspection, more local freedom to select textbooks and hire teachers, and the allowance of teachers' colleges to set and mark their own exams (*Report of Minister*, 1947, p.4).

[3] In 1942, the Department had, in fact, initiated this movement by encouraging teachers to turn to the each other for support, inspiration and validation of their teaching methods and content (2A-18, 2A-99). Pullen (1955) describes the many local initiatives that had evolved in local school-systems prior to Porter's announcement.

rather than failure" (Porter, p. 2). Last, and perhaps most important, Porter announced that "the responsibility for the outlining of courses in elementary schools will be placed as much as possible at the local or municipal level, particularly so in the fields of social studies, science, art and related subjects" (p. 4). This would entail a major shift towards decentralisation of the curriculum process from Toronto to local curriculum teams. Specifically, Porter envisioned teachers, working under the supervision of a curriculum co-ordinating committee, having a great say in revising earlier Departmental courses, or creating and implementing their own.[5] Immediately, 82 committees were set up around the province by local authorities to fulfil this mandate.

The turning point in the drive for decentralization appears to have occurred with the submission of the Hope report in December, 1950. Continuing to hold meetings right up until October of that year, the commission hurriedly distilled the 27 cubic feet of material it had collected, and then sent it to the printer. The base of the Commission's findings, however, proved somewhat anti-climatic, paralleling much of the "Porter Plan" to the letter.[6] When presented to the house by the new Premier, Leslie Frost,[7] a furious debate arose over the issue of Separate

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[4] This address, made before the St. Thomas and Elgin teachers was later transcribed and distributed in a government bulletin. See *Ontario Government Services*, Vol. 2, No. 17, pp. 1- 3, 5-8. Toronto: Queen's Park, November 15, 1949.

[5] This address was followed up by a number of circulars and a segment in the Minister's Annual Report of 1949 that reflected the same progressive spirit: "The substitution of primary, junior and intermediate divisions for the older classification is a deliberate attempt to free the school system from the shackles of the one-grade, one-book, one-year organisation. Experiments with the new organisation are in progress in many centres throughout the province. The freedom it permits should help solve some of the problems of retardation of the pupils held back because of weakness in one subject or another. A free organisation should permit progress in each subject at a rate suitable to the capacity of the individual, and the provision of subject matter related to his interests and needs" (1949, p7). Reflected in his many speeches, Althouse undoubtedly shared this feeling. See especially Althouse (April 10, 1950).

[6] As most of the Department's actions seemed to foretell Hope's recommendations, it seems quite probable that Porter and Althouse had been privy to most of the report beforehand. Fleming (1972b) went as far as saying, "the new [Porter] plan was worked out by those who knew what the Commission was going to recommend" (p. 189).

[7] While the Conservatives were returned to power, the election proved a personal loss for Drew, who withdrew to Federal politics.

schools and the obsolescence of many of its recommendations.[8]

Similarly, interest waned considerably within the educational community concerning "personalised" curriculum. By 1952, only 2 new local committees were created, while over 50 had disbanded (by 1960 only 6 committees were left). This may have been, in part, due to the incredible demographic changes that were occurring at this time in Ontario. To cope with the unexpected baby-boom and skyrocketing student enrolment after the war, the Department was forced to lower its teaching standards in order to hire as many new educators as possible.[9] It can be little surprise, therefore that a 1955 poll indicated that while teachers did support local control over the curriculum, few expressed a desire for exclusive teacher control over the curriculum (Pullen, 1955). Indeed, many new teachers stated that they were merely scrambling to get themselves prepared for the upcoming school year, and desired more concrete directions from the Department. Creating the curriculum by themselves was out of the question – most felt that this was something to be left to the experts.

The Dunlop Period (1951-1960)

Faced with indifference from the teaching community, an unstable student population, and daily criticisms from the floor of the legislature, Frost soon realized that Porter's reforms had become a losing proposition. A return to conservative, centralized control of the curriculum was necessary, he surmised, to help restore the public's confidence in the government. Immediately, he shuffled the cabinet and moved Porter to another position, replacing him with a longtime

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[8] The *Toronto Globe and Mail* remarked that "...the voluminous Hope Report on education, a 500,000-word volume that was five-years in the making, was tabled in the Ontario Legislature yesterday. It prompted joking and laughter among MPP's but no serious comment" (February 3, 1951).

[9] Between 1945 and 1968, the population nearly doubled from 4 million to 7.3 million (Ontario Department of Treasury and Economics, Ontario Statistical Review, 1968, (June 1969) p. 31), while the number of students enrolled in the Ontario school system almost quadrupled from 664,780 in 1945 to 1,986,796 in 1970 (Reports of the Minister of Education of Ontario). To compensate for these demographic changes the Department became engaged in a series of recruitment initiatives to lure in as many teachers as possible to Ontario. At the height of the teacher shortage, high schools graduates were allowed into the classroom with only a summer's training. For specific see Fleming (1972a, pp. 434-437).

Department bureaucrat, William J. Dunlop. The complete antithesis of his predecessor, Dunlop viewed decentralization as a farce. Rather, he put forward a rather paternalistic view of education: Ontario teachers' sworn responsibility, he maintained, was to inculcate a uniform body of knowledge, promulgated by a centralised Department, based on the will of the populace and established thought.[10] His intransigence on this issue did much to create a curriculum deadlock as the 1950s wore on. While Dunlop repeatedly voiced his antipathy towards the recent reforms, stating that it was his intention to remove from the curriculum "every vestige of progressivism,"[11] he was thwarted by elements within the Department itself (namely Watson and Althouse), the media, and the educational elite. In return, he systematically blocked almost all initiatives that did not reinforce the top-down structure of the Departmental bureaucracy: school board amalgamation, added funding to curriculum committees, and schemes for locally instigated professional development were discouraged as disruptions to the Departmental structure.

By the end of the 1950s a sense of ossification had appeared to set over the Ontario education system. Departmental bureaucrats, nervous about bearing the brunt of any media or teacher onslaught, erected layer upon layer of policy barriers and office walls to defend themselves. Reporters, frequently meeting little more than silence and secrecy in their attempt to see what new initiatives were in the works from the Department, nicknamed Dunlop "Mr. Status Quo" (Foley, 1966). A pervasive feeling spread among the academic community that the government had once again become completely unresponsive to any outside initiatives and

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[10] His biographer, Foley (1966) concluded that Dunlop's paternalistic view may have been due to the fact that because he had not actively taught since the 1920s, he could never quite understand or appreciate the changes that had been made during the past three decades of curriculum reform. Dunlop was 70 and retired from the University of Toronto when he was asked by Frost to replace Porter. A neophyte in politics and reluctant to accept the position, his only flustered answer was "How do you go about that?" (p. V).

[11] When called on by the leader of opposition Farquhar Oliver "to exercise much more control over, and direction of, the curriculum in our elementary schools than they do now," Dunlop agreed with him, saying he was of same mind. "For the past 25 years the curriculum was just not all that we would want it to be. It takes some time to get it back, and we are getting it back to fundamental education, getting it back to stress the subjects that are really essential, in order to equip young people for the work they have to do." See Legislative Assembly, *Debates*, 25th leg., 4th sess., 12 March 1958, p. 777.

unwilling to experiment in curriculum or teaching techniques.[12] Beyond a dogged resistance to change, Dunlop's administration was judged by many scholars as displaying no real policy directions.

In consequence, very little curriculum reform ensued from the Ministry during the fifties. While almost every Annual Report of the Minister does mention the term "reform", it appeared more as a catch phrase than as something actually engaged in. Between 1950 and 1960, the suggestive guideline "Curriculum I:1", initially disseminated to the local committees as an outline for curriculum development, became a monolithic document, with only minor changes being added. The sentiment of Porter and the reality of Dunlop hit the researcher hardest when looking at the 1959 Minister's Annual Report: while it states that local coordinating committees continued to exercise powers granted them in 1950 to make adjustments in existing courses to meet local requirements, it also admits that divergence of these courses must be tied to the use of prescribed textbooks issued from the Department (which never changed).

Features of the Period:

While the Porter era (1949-1951) was only a small opening segment to this period, it was also the time of the most intense dissemination of curriculum related material. This study will include, as a source, Porter's initial address outlining his plan (November 3, 1949), as well as three Departmental memos further demarcating the changes that were being made to the curriculum (December 10, 1949; March 30, 1950; May 15, 1950). Perhaps the most important document for this study is Curriculum I: 1 (1951), written by a small committee of Departmental officials. While it is praised as less prescriptive than earlier guidelines, at 289 pages it is undoubtedly as detailed as its predecessor. Like the previous programmes, it consists of a

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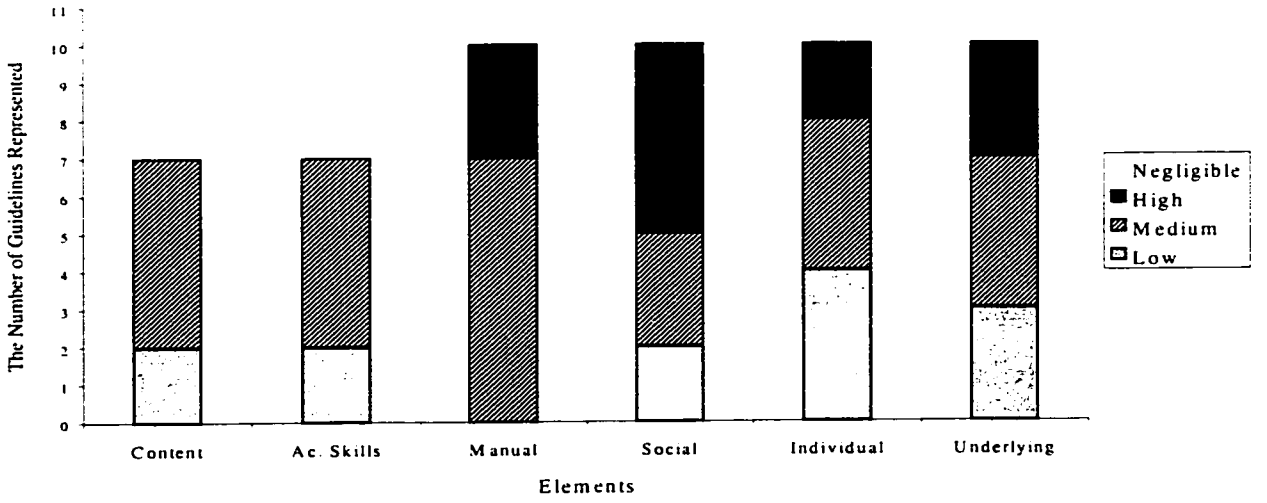
[12] Dunlop did have several supporters among many Ontario teachers, who did not seem to mind the return to centralized curriculum design. Foley claims that many of them referred to Dunlop as the "Great White Father" (1966, p. XXX)

preamble followed by separate sections devoted to English, Math, Social Studies, Science, Physical education, Art, Music, Home Economics (for girls) and Industrial Arts (for boys). A separate guideline is devoted to the new Guidance course. Between 1951 and the end of this period, no further documents of any mention were issued by the Department.

Analysis of Dimension A: Elements Used During Integration

In many ways, period 3's Dimension A appears to be little more than an evolutionary, mutated variation of the previous two. The forms just seem to be falling back to the mean: Content and Academic skills become more weighty throughout the subject areas; Manual and Social Skills retain their towering importance as elements to be integrated into the curriculum; Individual Development and Underlying Principles still struggle to find out where they should fit into a unified programme (see chart 3.1, 3-1E). What is important is the increased recognition on the part of the Department of each element. Rather than choosing one element over another (like social skills versus individual development as in Period 2), Curriculum I:1 appears to make more room for them all without sacrifice (see pp. 520-527 for details of each element).

Chart 3.1 - Dimension A (The Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

Student-Centred Integration Becomes More Passive

In decentralizing curriculum design, the Department appears to have shown a genuine concern in creating a system that was more sympathetic to the needs of the local situation and to individual differences among all students. While this standpoint is not a great change from the previous periods, it is based less on British theory and more on a concern for the continued student dropout rate and apathy in the classroom.[13] The Department repeatedly advises local curriculum committees to make the "programme of instruction more realistic and of more immediate interest" (3B-7). The purpose for this is clearly laid out in the main document: "The development of good study habits is accelerated when the pupils have a genuine interest in the subject and are convinced of the value of mastering it" (3C-37). Guidance further develops this premise by stating that when "subject matter related to the student's immediate needs is immediately realistic and helpful, there will be little difficulty in gaining acceptance later in the course for material related to more distant needs" (3E-8). In other words, the Department hopes that teachers will capitalize on the students' interests and use them effectively to develop subject-related skills and attitudes. While Curriculum I:1 uses the quotation by educationalist Mark Van Doren "Teaching is the art of assisting discovery to take place" (3C-47) as a central rallying point, it may be more accurate to say that teaching, in this instance, is the art of assisting ***interest*** to take place. It is hoped that this would bridge the gap between what students are interested in and what they must learn.

Rather than being encouraged solely in the preamble, as was the case previously, however, teachers are encouraged throughout the guidelines to make the courses within the students' grasp (3C-3). Specifically, English literature is made more relevant (3C-23, 3C-32, 3C-39, 3C-43, 3C-51, 3C-52, 3C-53), while the Mathematics section bases many of its problems on

practical issues, meaningful to the pupil (3C-86, 3C-87, 3C-93, 3C-95, 3C-96, 3C-97). The document further explains that there should be room made in every course for each student to have some outlet for self expression, be it in writing (3C-49), music (3C-115), artistic expression (3C-101, 3C-109, 3C-111) or physical education (3C-60). Home Economics perhaps makes the greatest effort to mimic students' natural lives so that they may see the uses of the course (3C-123, 3C-124, 3C-125, 3C-130, 3C-133, 3C-138). This course stands out from the others in its honest attempt to make the student's interest a keystone of program evaluation.[14]

Home Economics aside, it appears that the Department is beginning to present a far more passive view of "child-centred" education than existed in the previous period. In its discussion of "meeting of needs of the student" a rather abstract tone is taken. It is inferred that the students themselves will only have a nascent suspicion of what their real needs are (as opposed to their wants) – identifying and satisfying them should be left up to experts. While outright overteaching or "spoon-feeding" (3D-1) is discouraged, teachers are given strict veto power over most activities within the curriculum. This ambiguous "limited freedom within slowly tightening boundaries" approach can be observed especially in English (3C-42, 3C-47, 3C-71), Social Studies Activities (3C-77 to 3C-84), and Industrial Arts (3C-119).

Subject Unity a Growing Concern

It can only be assumed, therefore, that while the Department was quite sincere about the decentralizing direction it was taking, it was also fearful of the ramifications for loosening its grip of power. No longer prescriptive, documents put out from the centre could represent only general fields of study in a given subject, leaving teachers' committees to interpret and adapt the curriculum at will (3C-2). This could mean better, more adaptable courses of study - but this

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[13] According to the Minister of Education's Annual Reports, the percentage of those proceeding to secondary school had risen from 8% in 1901 to 18% in 1937. However, this ratio did not change until 1950.

could just as easily mean chaos as a once unified programme is dashed into a thousand pieces, interpreted on the basis of personal opinion. To counteract this potential dilemma, the Department put forward many ways in which there could be a "coordination of courses of study into a unified and continuous programme" (3B-2, 3C-3). They also hoped to maintain some semblance of control through the centralized control of textbook selection.

While the Department did mandate the removal of what it saw as artificial barriers, including the unifying of Grades 7-10 into an "Intermediate Division" (see Dimension D) and the complete elimination of external examinations (see Dimension F), it strictly maintained that certain subject areas with "natural" links existed. Curriculum committees were forbidden to tamper with this natural order, therefore, and set up by central authorities along subject-related lines. This "unity of the curriculum" is made especially clear in Social Science (3C-62, 3C-70) when it is mentioned that all the various sub-disciplines of History, Geography and civics be brought together. Similarly, in Science, the authors state that "an effort has been made to unify the various topics into a relate whole" (3C-100).

The Department did set up a number of programmes that can be seen as interdisciplinary, but none were considered "core". For instance, within Curriculum I:1, teachers were told that Guidance "should not be considered as a separate subject for which one or two teachers of the staff are responsible, but rather as a purpose which integrates the whole school programme and a service for which every teacher assumes a share of responsibility" (3C-13, see also 3E-1, 3E-3). It was recommended that it should be spread across English, Social Studies and Health courses (3C-37, 3E-14, 3E-18), each subject focusing in on specific areas of guidance.[15] Similarly, Health is said to be a concern of all teachers and that it should permeate the entire curriculum as a way of

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[14] It bluntly asks teachers, "Does the programme provide experiences which take into consideration the characteristics, interests, and needs of adolescents?" and "Are the experiences so real and life-like that the pupils are stimulated to use their new knowledge and skills in their personal, family, and social living?" (3C-136).

[15] It must also be noted that Guidance was soon made into a special period with specific content (3D-3, 3E-16).

reinforcing and uniting itself (3C-14). However, there is acknowledgement by the Department that "some of this instruction will be given incidentally as suitable opportunities arise; much of it will be part of the regular units of the various courses." Some subjects are just naturally drawn to Health – namely, Physical Education, Social Science, Science and Home Economics (3C-16).

With all its mandates, however, the Department had to admit that the actions of teachers would be the most pivotal in unifying the curriculum. As the information and skills had become more specific after the war, a general tendency had occurred among North American schools for the subject areas to become more isolated, especially in the later grades. The Department, therefore proposed to solve this problem with the creation of "Home Room Teachers" to bring some organization to the core subjects. The Department suggests that they teach naturally-related core subjects like English, Math and Social Studies (3C-11). Specialist teachers would then teach the more fringe subjects like Manual Training or Music. This would keep a natural unity to the curriculum and would smooth students' minds when they made the leap from grade to grade – the school experience would then be seen as a unified whole (3E-6). Regardless of subject specialty, therefore, teachers would have to be aware of what was going on in other courses and grades to aid this at the local level (3B-3, 3C-124). Coordinated planning is especially recommended by the Department as a way of reinforcing and combining skills and information across the curriculum (3B-5, 3C-19, 3C-34, 3C-35, 3C-36, 3C-73, 3C-90, 3C-94, 3D-6). Home Economics is emphatic about the need for subject-centred curriculum integration with certain natural connections: "Correlation of Home Economics with such other subjects as Art, Physical Education, Science or Social studies is essential in the planning of an integrated programme for the general education of the pupils" (3C-131).

Social Continuity an Important Post-War Issue

As in the past, Curriculum I:1 states throughout that it is the teachers' responsibility to inculcate a sense of social continuity into the students. Students should be made to understand

the community and nation to which they have been born into and that each one should know the position that they must fill. This is explicitly accented in the Social Sciences, (3C-69, 3C-75, 3C-77, 3C-79, 3C-81, 3C-64), Art (3C-108, 3C-109), and Guidance (3E-2, 3E-5 to 3E-19). Home Economics takes a new twist on this premise, it's *raison d'etre* being to teaching young women the importance of the home in relationship to the functioning of a democratic state (almost as a microcosm). For a society to flourish, so must a home life (see specifically 3C-121 to 3C-125, 3C-130, 3C-132, 3C-141) otherwise known as practical citizenship (3C-133). Even boys are supposed to take the odd week of home economics to show them what girls will do, and therefore appreciate their role (3C-135).

This curriculum goes beyond general overviews, however. Here, the Department makes concrete statements about specific ways of becoming a good member of society. First, it promotes the teaching of basic skills so students can get along as better citizens (3D-6). English skills – reading and handwriting - are necessary to become a functioning member of society (3C-19, 3C-20, 3C-58), and in running organizations (3C-55). Math skills (3C-85, 3C-94) are needed to compute accurately and apply to everyday problems (3C-93, 3C-95, 3C-96), while Science skills (3C-98) should be learned to be knowledgeable citizens. Practical group leadership, craftsmanship and the running of a household are all cited in Physical Education (3C-61), Industrial Arts (3C-117, 3C-120) and Home Economics (3C-137, 3C-140) as precursors to good citizenship.

English is perhaps most outspoken in its attempt to promote proper attitudes and behaviours among students. Repeatedly, the English section tells the teacher to try to promote "good taste":

> The main objectives in the study of literature are the cultivation of a taste for good reading, the enlargement of experience, the stimulation of the imagination, the enrichment of knowledge, and the development of character. The pupil develops a richer and fuller personality by association with great minds and through wholesome vicarious experiences. An imagination stirred by Kipling's art in the

> pages of "Captains Courageous" will be less likely to respond to the cheap sensations of the crime thriller. But teachers should avoid fulsome praise of classic writers. Let the author speak eloquently for himself. (3C-28)

Through constant exposure, students will eventually develop good taste (3C-29) and have the ability to "distinguish fine literature from shoddy writing" (3C-40) – to make sure, the Department includes what it considers paragons of good Canadian writers (3C-44). This good taste also extends to the proper way of conducting a conversation and behaviour (3C-45, 3C-46, 3C-54, 3C-56, 3C-66 to 3C-68). The Department states that

> Pupils should be led to recognize that language varies in different circumstances and for different purposes. Language has social significance; it is governed by the rules of good taste as well as good usage. Thus, the language of the ball game is one form of appropriate English, whereas the language of the class discussion is another (3C-30)

Curriculum I:1 reminds local committees to design each programme so that it reflects the outlook of the community and the nation (3C-6, 3C-118).

A Steady, Conservative Approach to Change

While not appearing that important in the actual words of the curriculum, the Department's actions in relation to decentralization clearly show that they are trying to force society to change, and are using the curriculum process to do it (see Dimension C & D).

Within the curriculum, the Department also endeavored to raise the consciousness of students (and thereby future citizens) through the introduction of two new issues relevant to society. The first to be introduced was a new area of study called "Conservation" with the hope of teaching students to respect natural resources (3A-7, 3A-8, 3C-91, 3C-92). While earlier memos state that information about this topic should be dispersed throughout the curriculum (3A-7, 3A-8), Conservation appears to fall into the Math and Science areas of the guideline (3C-91, 3C-104, 3C-105) as well as Social Studies (which takes the strongest ideological stance):

> Social Studies should help the pupils to understand and to improve the democratic way of life. At present our material progress has outstripped our social development. We must define and meet our responsibilities to society more effectively if we are to live on good terms with our fellow men. (3C-63).

Similarly, new "Guidance" content is also encouraged to be taught by all subjects to reinforce its importance (3C-13, 3C-37, 3C-68). Like the progress of the previous "Religious Instruction", however, Guidance is quick to receive a separate slot on the course time-table (see 3E). One aspect that does filter into each course is that of the changing "world of work", making students aware of what awaits them in the future, and how to prepare adequately for it (3C-132, 3C-133, 3C-135, 3C-136, 3E-5, 3E-13, 3E-17). Special manual training is also taught in the increasingly subjugated classes of Industrial Arts (for boys) and Home Economics (for girls) (3C-117, 3C-120, 3C-126, 3C-129, 3C-136, 3C-138). Unlike the 1938 programme, however, little mention is made of what students will do in leisure time (3C-10).

Analysis of Dimension C: Loci of Integration

Perhaps the most radical changes that took place within this period were those effecting this dimension. While Period 1 had put forward a new philosophy, and Period 2 a new approach, Period 3 reconstructed the Ontario educational system in an effort to deal with this progressive agenda. To accomplish this, the balance of power in regards to curriculum construction had to shift downward from a centralized, elite committee to include more broad-based teams of designers.

On the surface, it looks like the Department had allowed just such a revolution to occur, giving away much of its authority (see 3A-1 to 3A-6, 3B-1 to 3B-7, 3C-7, 3C-8). By abolishing any prescriptive programmes and replacing them with more general course outlines, it seems that the Department is making the process much more democratic (3C-2). However, as indicated in a

report by H. Pullen (1955), the Departmental sponsorship of these committees was not completely altruistic. Informal teacher groups had existed for several years, creating their own curriculum designs and ignoring the outdated 1942 programme. Pullen maintains that the Porter Plan was a way for them to be officially sanctioned, legitimized, and resubjugated back under central power. While teacher empowerment in curriculum development may have been a key issue in the rhetoric, Pullen points out that this proved difficult in reality. In creating a new curriculum, a strict chain of command had to be followed. Teachers could voice their opinions and criticisms to a school committee, which in turn responded to a district committee. The district committee would then respond to a city wide subject committee. Each of the three city-wide subject committees consisted of 17 appointed members.[16] This committee would then create a new curriculum, operating under the supervision of a central coordinating committee, which had the ability to veto these subject-centred committees if it so chose. Ironically enough, the Department assigned Stanley Watson (the man who had been so seminal in the creation of all documents during the previous two periods) to chair this central body.

In surveying the committees throughout the province, Pullen found that much initial work was accomplished, and that over 1200 revised courses were being implemented by 1951. Fleming (1972) later added that these "courses of study did not, however, break much new ground" (p. 189). Rather, they seemed to be variations of a booklet entitled "Curriculum I:1 - an experimental outline of courses" that the Department had issued to the various committees as a "suggestive outline of courses of study in the subjects for Grades VII, VIII, IX, and X" (p. 3) to aid curriculum creation.[17] Once Dunlop became firmly entrenched in power, the document

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[16] In the Ottawa area at least, one was chosen from a central coordinating committee appointed by the Department, eight were chosen by the public or separate school inspectors, and eight were appointed by the Superintendent of Schools.

[17] The documents states that it had been the product of "Recommendations from the Ontario Teachers' Federation and the Ontario Educational Association", "Committees of the Ontario School Inspectors'

appears to have changed from merely "an example and a basis for discussion", to a programme as monolithic as the previous ones. The change in attitude is clearly demonstrated in a 1952 Memo from Dunlop entitled "The Progress of Curriculum Revision" sent to the school board authorities. It stated that those boards who had not directed any experimental programmes "will be required to direct their schools to follow the course of study issued by the Department for the various grades and divisions" (p. 4). Despite protesting that these were outlines intended to be adapted to local conditions, the new attitude was clear in the final warning. "The Department's supervisory staff will examine the local adaptations with a view to ensuring ample provision for the mastery of 'the three Rs', flexibility of promotion, and the recognition, in the secondary grades, of the requirements both of those pupils who will leave school as soon as the law allows and of those with the ability and determination to attempt longer courses" (p. 4).

While slightly more power was given to local authorities within the Ontario school system (namely boards and school administration through the use of committees), it is apparent that the Department did not whole-heartedly promote a "revolution" in education. The traditional linkage of Department to teacher still remained strong – the former creating broad outlines of material, and the latter choosing the best approach to transmit that information to the student. Dunlop's 1952 memo, in fact, congratulated Intermediate Division teachers for their effective use of their new powers: "an unprecedented measure of cooperation has been achieved by teachers of public, separate and secondary schools, to the immediate benefit of the pupils concerned" (p. 3).

Teachers were still considered the persons of prime responsibility for educating the student. Throughout Curriculum I:1, it is up to the teacher to use the teaching (and integration) approach that will interest the students the most,[18] to keep a "mentally healthy environment", free

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Association and Representatives from the staffs of the Normal Schools and the Ontario College of Education", and "the Department of Education."

[18] Seen in English (3C-26, 3C-37, 3C-41), Social Science (3C-72), Science (3C-98, 3C-99), Music (3C-114), Industrial Arts (3C-117), Home Economics (3C-133), and Guidance (3E-5, 3E-12, 3E-17, 3E-7, 3E-19).

from anxiety, frustration or work overload (3C-17, 3C-88, 3C-90, 3C-53), and to address student differences (3C-134, 3C-32, 3C-21, 3C-22, 3C-4, 3C-5, 3C-9).

The clearest voice of the progressive philosophy can be heard in the Home Economics section:

> To make the programme purposeful and stimulating to the pupils and to relate it directly to their daily living, it is desirable that the pupils share with the teacher in planning, carrying out, and evaluating the learning experiences. The role of the teacher is one of motivation and guidance. At first the pupils' share of responsibility will be limited, but as the pupils grow in experience, and as the teacher and pupils become better acquainted, the pupils will gradually assume a greater share of responsibility (3C-126).

It then calls for the joint student-teacher creation, implementation and evaluation of the course (3C-126 to 3C-128). However, this is very much the voice in the wilderness, and it is unknown whether it was ever put into practice (increasingly unlikely as this period proceeded).

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

The Porter Plan made a significant change in how Grades 7 & 8 were viewed by the educational community. Whereas earlier programmes had viewed this time as the natural ending to an elementary education (and in many cases the closing of formal education, period), this period clearly breaks away from that tradition. Well aware of the drop-out rate, the Department recreated these grades as part of a larger, upward-looking "Intermediate Division" encompassing Grades 7-10 (3A-3, 3A-6). This would ease the students' transition from elementary to secondary schools. Even if many still dropped out, the Department hoped that this new arrangement would extend students' time in school, and make them better participants in society when they leave (3C-3, 3C-10).

Analysis of Dimension E: Integration Methods/Approaches

Primary Forms of Integration

The ***Thematic Approach*** continues to be used as a prime teaching tool in this period. However, this is a far different approach than the Enterprise. Rather than child-centred, student-chosen projects, these themes are divided into units, and almost without exception, chosen by the teachers on strong suggestion by the Department. The point of these themes seems to be different as well. Rather than trying to make students into co-designers or team-players, the point of the exercise is to masquerade the information and skills in projects and themes to interest and enthuse the students. Furthermore, these units, unlike the previous period, appear to stay within the boundaries of their subject areas and time schedule. Only science brings in other areas (3C-104, 3C-105) and no projects are encouraged to last more than a few hours. So, although this is a primary form of integration used in the curriculum, it is far less interdisciplinary than the previous Enterprise.

Another form of Integration that runs through the entire curriculum is ***Harmonization***. It too should be considered a fairly "watered-down" attempt at the approach. In the preamble and accompanying memos, much is made about the centrality of the three basic skills of reading, writing and arithmetic, as well as the promotion of the democratic way of life, conservation, guidance and health. All are purported to "imbue" the curriculum, to permeate into each course. However, in reality, each one is slotted into one or a number of subject areas (making it resemble ***Insertion***). English skills are highly promoted in English, but only seriously dealt with in one other course - Social Science (3C-19, 3C-77 to 3C-84). Otherwise, they only receive a brief mention in Math (3C-90, 3C-94) and Science (3C-98). Math and Science skills fair even worse, not being mentioned outside of their specialized subject areas. The harmonized Health, actually shrinks from the previous period to being shared between Physical Education and Home Economics, while Guidance (although there is a faint protest that it permeates the curriculum)

seems to be relegated to one special course ear-marked for isolated study (3E). The one issue that remains as truly harmonized is the belief in democracy and citizenship, which is mentioned in almost every course.

Perhaps due to the Department's fear that a decentralized curriculum may degenerate into a chaotic curriculum, it does encourage the ***Nested Approach*** in almost every subject area. Each course is organized in such a way that it should follow some sequential order to form a unified whole.

Secondary/Localized Forms of Integration

The programme continues to advocate a great amount of ***Correlation*** between subjects (3C-73, 3C-77 to 3C-84) in a general fashion across the curriculum. English makes mention of other subjects in general and Science and History in particular, simply as material to read and research in the process of learning English skills (3D-36, 3C-44, 3C-53). In turn, English skills are promoted in Science to help them make connections - but only weakly (3C-102). English is especially correlated to Social Sciences in this period: "for example, with English through dramatization, discussion, vocabulary study, writing stories, reports, diaries, and by using Social Studies subject matter in English compositions" (3C-73). Numerous examples are given throughout the Social Science section (3C-77 - 84). Vague mention is given to most of the subjects in relation to each other. The Department states that Health instruction will be given incidentally (3C-16), but then retracts this in the next statement saying that insertion is the integration method of choice. Art hints that some connections should be made to West-coast artisans, and French puppeteers when staging a play for marionettes that the students have created (3C-112) - thereby bringing in English and Social Studies - if only by serendipity. The one subject actually explicitly making mention of correlation is Home Economics. Stating that it should factor its relationship with other subjects into any planning processes (3C-124), the guideline declares: "Correlation of Home Economics with such other subjects as Art, Physical

Education, Science or Social Studies is essential in the planning of an integrated programme for the general education of the pupils (3C-131).

Insertion is a strong, if rarely used, approach throughout this period. The new content area "Conservation" is handled this way. Equal portions of material are inserted into the Social Studies and the Mathematics sections (it being most evident in the latter, getting a whole subsection - 3C-91 to 3C-97). Likewise, Health is supposed to be sliced up and given equally to Physical Education, Social Science, Science and Home Economics (although Phys.Ed. takes the brunt throughout this period. See 3C-15, 3C-16, 3C-123, 3C-140). While the combining of Science and Agriculture could technically be considered fusion, it seems more like a hostile take-over. With Science gaining in importance and Agriculture losing (due to the declining rural population), the former appears to just swallow the latter up, agricultural issues being inserted into the Science curriculum at appropriate moments. Lastly, and perhaps most interesting, Guidance begins this period as a free-floating subject that is said to be inserted in each subject area. However, in short time, it is removed from the hands of the regular subject teacher (except to tell the student the occupational potential of the field), and given to the expert counsellor. This is an example of "dis-integration".

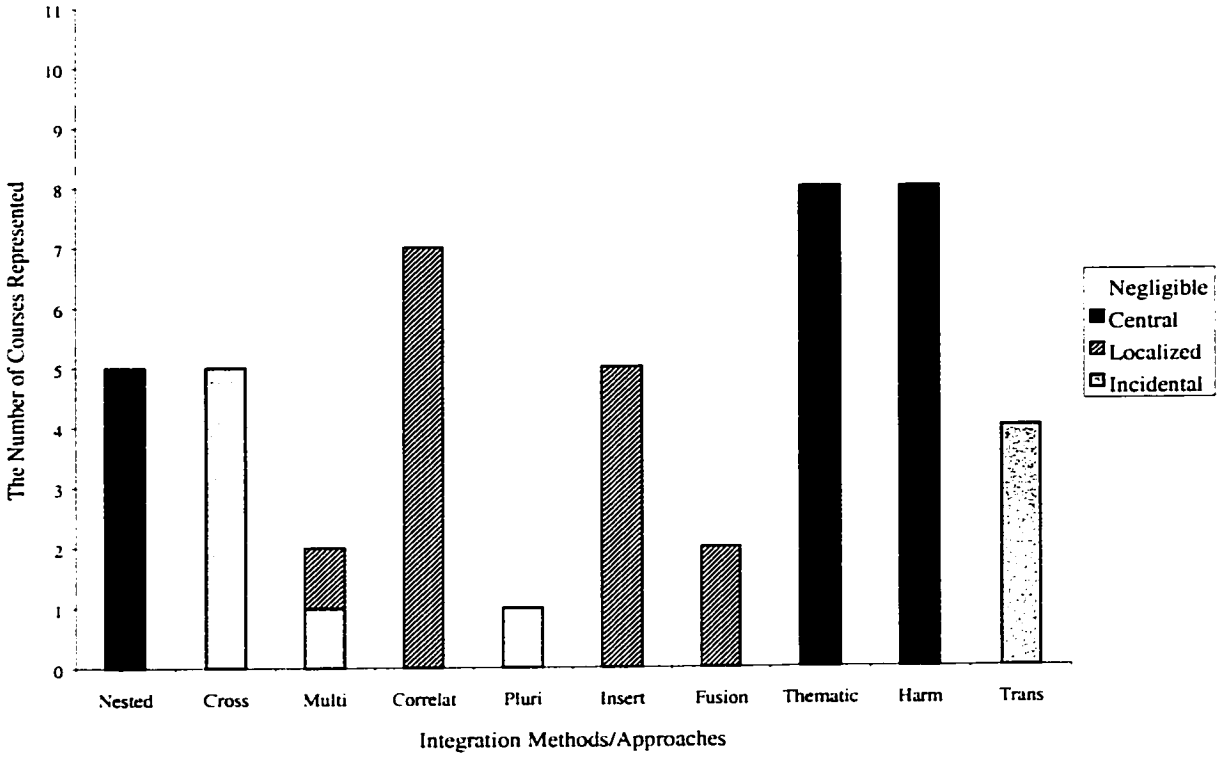
Incidental Forms of Integration

Mention is still made that Social Sciences is a ***fusion*** of History, Geography and Civics, but this is only stated once now (3C-62), and the premise is beginning to appear shaky. The set up of the section almost seems to be a precursor to a fission of its requisite parts, as each are given a certain amount of independent maneuverability.

Lastly, the ***Multidisciplinary Approach*** is mentioned quite enthusiastically, if very broadly in the introduction of Curriculum I:1. However, few concrete steps are made to bring teachers of different subjects together for joint projects or team teaching. It is true that this was the era of the teachers' committees and the collaborated curriculum. However, little reflection of

this is felt throughout this period at the guideline level. The only subject area that makes more than a passing nod to this method is the Home Economics guideline, which encourages student exchanges and some joint planning with other teachers, students and the community.

Chart 3.2 - Dimension E (The Importance of Integration Methods/Approaches)



Analysis of Dimensions F & G: Implementing Curriculum Integration

To a large extent, the Department appears to have believed that the amendments made to the curriculum structure would do much to alleviate any problems of implementation or maintenance of the reformed programme. First and most importantly, the Department made a real link between teacher ownership of the curriculum and the ease of which it would be implemented and accepted by the teachers. If they were involved in the process of creating the document, if the creation was an open policy where all stakeholders can have a say, then everyone would work harder to implement it and feel part of a team process.

However, this belief rapidly disintegrated as more and more interest groups were allowed into the process – because so many voices were allowed into the curriculum creation process, it became a cacophony. No clear opinion could be heard. As such there was little resistance when Dunlop emerged to put an end to the open policy and reestablish much centralized control.

At the classroom level, the Department appeared to take a more benevolent view. It encourages teachers to keep a wide view of the curriculum by creating a home-room teacher, trying to encourage teacher interaction, and leaving expectations fairly broad. As in the past, the Department ignored any active role in aiding teachers. However, what it did do, initially was to free up restrictions so that many aspects of implementation (like professional development and resources) could be downloaded to local committees. As these local pools of succor began to dry up, however, Dunlop did very little to buttress the sagging state of teacher-aid.

Overall Remarks on Period 3

It cannot be denied that a radical change happened to the Department's perception of Curriculum Integration during this period. However, with all the rhetoric about "decentralization" and "individual differences", it is rather surprising to view the shape that this new definition took. In essence, this philosophy of integration appears to be one that is more rigid in form and subject-centred in objective. For this study, the following inferences can be made about the integration process during this period:

1. Grades 7-8 Grow up

In tying Grades 7-8 to the Intermediate Division, the Department had made a crucial decision to distance them from the elementary system (see Dimension D). As such, the adolescent was no longer equated with the end of childhood but more with the beginning of adulthood. Suggested teaching approaches now had to be applicable to 4 grade levels, with an emphasis on more mature forms. Approaches are chosen for two purposes: their ability to efficiently synthesize and make use of the growing amount of information and skills; and their ability to instill in students interest and meaning long enough to help them retain this knowledge. While teachers are instructed to meet individual cases, the days when the curriculum's concern was the "mimicking of children's thought processes" has retreated into more abstract discourse than concrete examples. It is more concerned with preparing the student for the "world of work", and the things to know as a citizen (Dimension A). While the Department attempts to create a balance between the various objectives (see Dimension B), the growth of "subject-centred integration" is unmistakable in this period. This will do much to mutate the approaches that, on the whole, are the same as the previous period. By Period 4, however, this change in perception will have a staggering effect on the approaches taken.

2. Thematic Approach Mutates

While the thematic approach to integration is applied as heartily throughout Curriculum I:1 as ever it was in the past (see especially Social Studies, Math and Home Economics), it cannot be seen as serving the same purposes. The Department no longer felt that true learning could come simply from within the students put in the right environment and given the right activities (as had been the belief of the Enterprise Method). Rather, an idealist philosophy is promoted. Material exists that will help students get by in life – it is the responsibility of the thematic "units" to organize this information in an interesting and meaningful way to the students. Therefore, while themes remain, responsibility for its direction was almost completely removed from the hands of the students (indeed, outside of Home Economics the student is rarely even acknowledged) and given to teachers.

3. Harbingers of a Splintered Curriculum

It can be inferred that many changes made to the programme of studies at this time were based on the Department's assumption that the curriculum should be viewed as a growing "body of knowledge" and that there were certain ways for it to be taught efficiently.

a) ***A Homeroom Teacher*** – with the creation of this role, the Department is implicitly stating that the entire curriculum cannot be taught by one teacher. No longer overseers of activity, teachers are now envisioned as purveyors of knowledge. And, as the amount of information relevant to students' wellbeing is growing astronomically throughout this period, it is reasonable that this body of scholarship called the curriculum should be cut up into more digestible chunks. In the mind of the Department, the natural bailiwick of the Homeroom Teacher should be the related (and general) subjects of English, Math, and Social Studies.

b) ***The Encapsulation of Vocational Studies*** - Consistent with the trend seen in the previous period, practical work and skills were even further distanced from the "core courses". Encapsulated into Industrial Arts, crafts are all but excised from the previously coordinated curriculum. Art, Music, and Physical Education also became more distanced from the more "general courses". Although not formally forbidden, Homeroom teachers are discouraged from teaching these subjects as they should be left to "specialists".

c) ***Mechanistic Insertions*** – Another phenomenon that begins to make an appearance is the way in which the Department begins to include new information and topics. When it is given the mandate to include more "Conservation", it does so by merely inserting sub-sections in Curriculum I:1 where it feels appropriate. These are fairly isolated chunks - no effort is made to relate it to its surroundings. It can be inferred that this is done on the basis of efficiency rather than any desire to create any unity across the curriculum.

d) ***Guidance Swallows up Individual Development*** - The last example of the imminent victory of an efficiency-based disciplinary system can be seen in the creation of a new Guidance programme. While early attempts are made in this period to resurrect the importance of individual development across the curriculum (as it had been suppressed during the last period), it becomes obvious that for it to survive a special course must be dedicated to its study.[19] Here rested the dichotomy of this period - a special class had to be created to deal, in an accountable, concrete way with a particular aspect of the learning experience. However, in creating a separate course to zero in on this one aspect, it did little to promote integration (3E-1, 3E-5, 3E-7, 3E-8, 3E-19, 3E-4, 3E-13).

4. Without Support, the best Intentions of the Period Dies

Perhaps the most radical facet of the period was the introduction of locally created curricula. The hope was that with enhanced stature, the teacher should be encouraged to greater professionalism and activity. Individual teachers and teacher committees would have the new ability to transform the curriculum to fit their specific needs. Moreover, the teachers committees and overseeing curriculum committees could supply concrete training and resources. Educators would no longer be alone in dealing with the curriculum but could draw upon many stakeholder groups: Principals, boards, federations, parents and the community. It seems that the Department (at least under Porter) expected autonomy and responsibility to go hand in hand resulting in more successful implementation. This is indicated by Curricum I:1's repeated mention of the teacher as fundamental role model for pupils and the educational approach. Greater coordination between teachers also enabled the Department to introduce a multidisciplinary approach for the

[19] In fact, with the secularization of education after the war, Guidance appears to have replaced the course in Religious Instruction, certainly in relation to individual development.

first time – and on a very large and ambitious scale. Teachers were encouraged to coordinate their activities and topic selection in Science, English and Social Science.

Despite these flamboyant beginnings, however, local control bore meager fruit. This can be tentatively clarified when observed through the perspective of the "Hygiene-Motivator" model put forward by Herzberg (1959, 1966). Initial change was driven by a certain amount of coinciding needs within the educational community:

- Many teachers needed a new curriculum that reflected changes since the War (+).
- Some educational groups called for grassroots involvement in curriculum design (+)
- Porter was ambitious to make a name as an educational reformer (+)
- Althouse had a desire to realize his dream of a humanist, decentralized system (+)
- The bulk of the teaching community were neutral on the subject (0)

However, as the 1950s dragged on, these overwhelmingly positive motivators began to disappear to be replaced by more neutral, hygiene elements and de-motivators:

- A new and generally satisfactory curriculum (I:1) had been introduced (0)
- Continued neutrality by the bulk of the teaching community (0)
- Very difficult for individual voices to be heard in the new local committees (0)
- Educational groups still calling for grassroots involvement (+)
- Conservative media and scholarship call for a return to centralized accountability (-)
- Dunlop thoroughly opposes any decentralizing or progressive changes (-)
- Althouse puts up continued struggle to decentralize (+)

Because of the almost perfect balance maintained throughout the 1950s, it is not surprising that a mired feeling of apathy ensued. Neither side could exert power without a concomitant countermove. Indeed, the pendulum would only swing in Dunlop's favour after Althouse's untimely death in 1956, leaving a vacuum within the departmental staff. As well, it appears that teachers in general were unready to apply the more intense forms of integration such as the multidisciplinary approach.

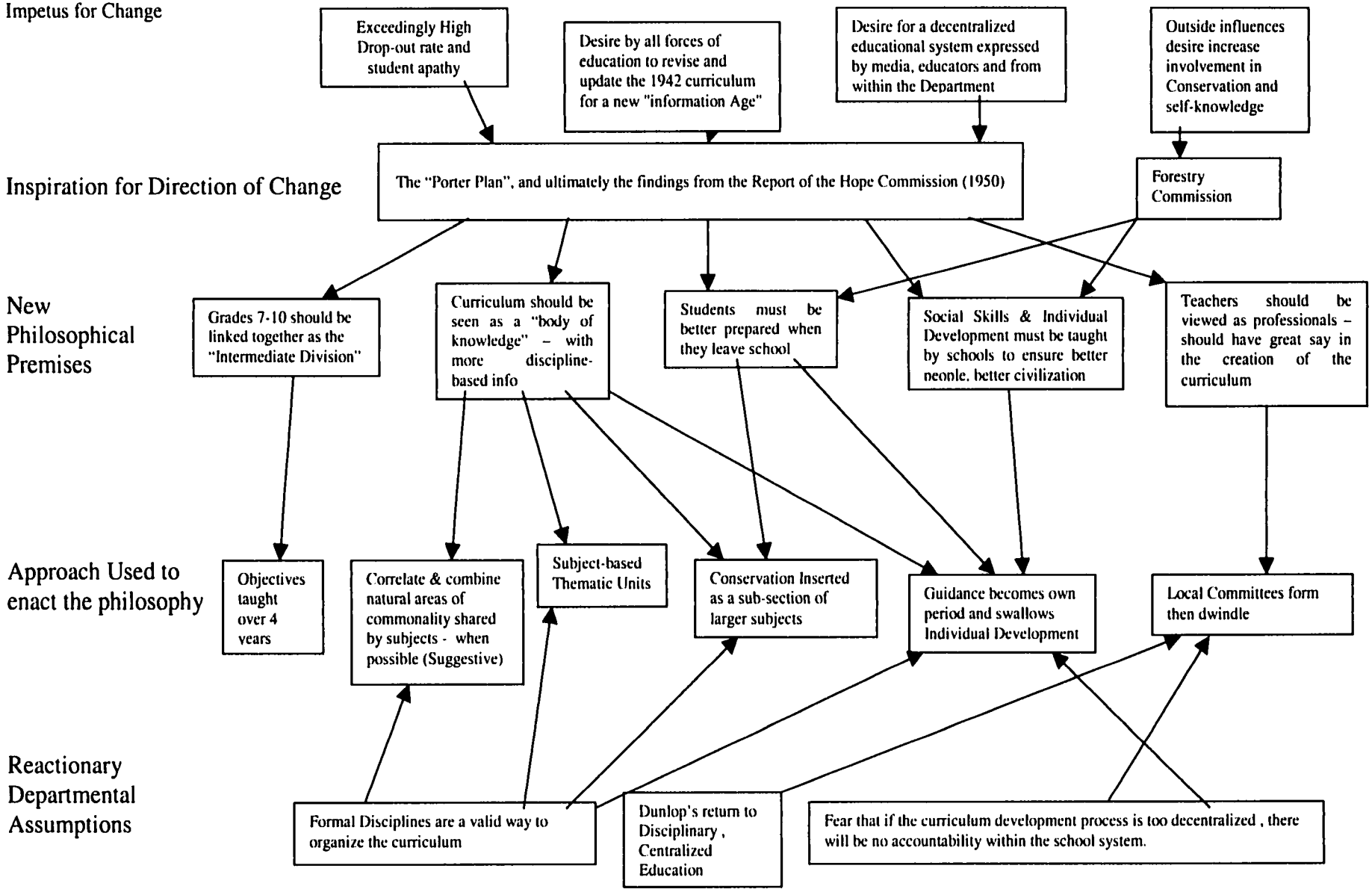


Diagram 3 - Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 4

"The Robarts Curriculum"

1960-1966

Context of the 1960-1966 Curriculum

Vast changes took place in North American society after the Second World War. While periods 1 and 2 had been marked by austerity, the 1950s experienced an unparalleled time of prosperity and growth (seen especially in the incredible surge in the birth rate). The scientific community, supported heavily during wartime by government funding, maintained that this continued economic success rested upon the expansion and development of technology and science. Furthermore, they believed that this could only be achieved systematically through sustained government promotion and patronage.[1] Of primary importance for this study, two recommendations were repeatedly submitted during the decades following the War. The first was that a "scientific mentality" should be inculcated in students: It was felt that Science, Technology and Mathematics should become the paramount subjects of study in order for contemporary youth to be trained for the workforce, and the world of tomorrow. The second was that a "scientific mentality" must be inculcated in school administrators: Modern mechanistic and human relations models had to be used in modern schools systems so that they could efficiently deal with the influx of new students. Of most importance, it was necessary to centralize schools into more regional units and to break the school day down into smaller subject-centred components, with specialized teachers for the system to be more accountable.

While some state governments did follow these recommendations, most school systems felt that no changes were necessary and did very little to update their programmes. The Ontario Department of Education was a shining example of this complacency throughout the 1950s. Remarkably little innovation took place throughout the decade, and the changes accomplished were done in the spirit of atavism. As shown in Period 3, the object of study in both the Mathematics and the Science sections had more to do with practical applications than any fundamental principles.

Dunlop systematically ignored these areas of study (as well as any vocational subjects) as he spent his term in office advocating a return to a "classical" education for the Ontario school system.[2]

By 1957, Dunlop could defend his position no longer, as the two issues of student population and the technological revolution coincided to create critical policy concerns (see Fleming, 1972a, pp. 12-15, 29-31, ch. 1 & 2). Just after the first wave of baby-boom children entered the intermediate level in 1957, the USSR launched the first man-made satellite, Sputnik. With heightened perceptions of the Cold War, North Americans felt that they had been beaten by the Communists due to their own complacency in their education system and a disregard for science and technology (see Gidney, 1999, pp. 39-42). In Ontario, critics once again lambasted the outdated programme (this time the old Curriculum I:1) as incapable of providing cutting-edge education. Dunlop's only response, however, was a lacklustre proposal to form a new science curriculum committee (Kinlin, 1966). Reticent to the end, he managed to hold any more comment at bay until his retirement in 1959 due to health problems.

As in 1951, Premier Frost found a replacement that mirrored the spirit of the time. He chose John Robarts, a man who stood in stark contrast to his predecessor. Young, ambitious, with unbounded talents as a shrewd statesman, Robarts made no effort to hide his intentions of fulfilling the aforementioned "scientific" recommendations and modernizing the Ontario school system. Through cunning diplomacy he managed, in his short stay, to perform a complete volte-face in the Department's educational stance. This was accomplished by his reliance on skillful

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[1] In a watershed report, *Science: the endless frontier,* (1945), the acclaimed scientist Vannevar Bush pointed out the fundamental importance of Mathematics and Science in helping the Allies win the war. He maintained that these two subjects should play an increased role in the grade school and university curriculum.

[2] Dunlop found ample support for his continued battle against progressivism, from the hugely successful book So Little For the Mind by Hilda Neatby (1953). Following her recommendations, his chief plans included the subdividing of Social Studies into History and Geography, and the addition of Latin back into the curriculum. Rule (1975) argues that Progressivism should be seen as a "bogeyman" at this time. In fact, he argues that "due to a host of problems peculiar to this period, the ultimate impact of the [1938, 1942] revisions upon the provincial system was negligible" (p. 91).

maneuvering, and balancing the aspirations of one interest group off another. In doing so he politicized the position of Minister from senior bureaucrat to that of foremost spokesperson for educational issues in Ontario.[3]

His initial action was to gain some financial leverage in creating this vision. He felt strongly that while Canada had benefited tremendously from the economic boom of the past 15 years, government spending on education had not kept pace. His job, he believed, was to rectify that situation. Beginning with the annual C.E.A. meeting in 1960, Robarts spearheaded and chaired the Standing Committee of Ministers of Education (Fleming, 1972a, p. 161). The end result of this was Ontario's participation in the *Federal-Provincial Technical and Vocational Training Agreement* of 1961 whereby the Federal government would pay for 75% of any technical/vocational projects embarked on by the Province. Robarts' background as a lawyer seems to have been very successful, for Ontario was to receive the largest financial support of any of the Provinces under this Act.

The vast insertion of funding was channeled into massive building projects, mostly large regional schools.[4] In a speech to the Ontario Urban and Rural School's Trustee's Association, he reminded his audience of the population growth in the Province's schools since 1946:

> ...88% of the elementary school pupils [were] educated in schools of 3 rooms or less... The Department of Education is aware that many fine scholars and leaders received their education in the Little Red School House, but it is also aware that rural elementary education in this Province is changing, as are other aspects of our life. The Department encourages Boards to provide central schools wherever they find it possible to do so. (*Robarts Speeches*, 1962-69, pp. 2-3, R.G.2, p.3, Ontario Archives)

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[3] The strength of Robarts' personality is seen throughout these adjustments. J.R. McCarthy, who served as Deputy Minister of Education, recalls him as a "statesman and a politician -- over and above a politician." (Interview, 1982).

[4] Before becoming Minister, Robarts had been involved in several local school building projects. He reported to the Stanford District Teachers' Council in Niagara Falls, Ontario: "In 1958, we were able to say that we had built a new building or a major addition to an old building in this province every day for ten years and this was taken to be a fairly dramatic figure. In 1960 we have passed this rate of construction for we will construct 557 such buildings or additions to accommodate 96,825 pupils at a cost of $90,500,000 (*Robarts Speeches*, 1959-61, R.G.2, O.A.)

Too savvy to use any coercive means in achieving his goal, Robarts used funding as an incentive to boards. First, the money was specifically earmarked for school centralizing projects,[5] as a means of making administrative units more efficient and accountable. Second, expansions were to include a host of new machine shops, science laboratories and technological additions. In short, projects were contingent on the active promotion of science and technology. Schools that chose to promote the old format of humanities-based education received nothing.

Changes were made to the Intermediate program to reflect what Robarts saw as a changing reality. These were outlined in his numerous speeches and interviews. During a televised CBC provincial affairs program on April 4, 1962, Robarts reported that "at the present, 6 out of 100 students go on to university," and that, while he expected that number to increase in the next 10 years, "it is doubtful if it will exceed 15." Emphasis on the Sciences, Mathematics and job-oriented programs were needed to meet an unprecedented school population and technological world. And this meant that students not going on to university must be trained in school to meet the world. He continually reinforced the "...realization that the available pool of immigrant manpower from European and other sources was drying up and that consequently Canada would have to depend more and more on her own people, trained and developed in this country."[6] Robarts used these facts as a springboard for revising the Intermediate and Senior level school system: entitled the Reorganization Plan, it was officially announced on August 28, 1961 and scheduled for incremental introduction in September 1962. Phased in over 5 years from Grade 9 to Grade 13, the plan streamed students into one of three branches: "Arts & Science", "Business and Commerce", and "Science, Technology and Trades." The curriculum for Grades 7

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[5] Fleming (1972d) devotes an entire chapter of his massive tome to showing the decline of the one room schoolhouse and its replacement by a regional school over the 1950s and 60s (pp. 396-422). An especially big leap was made under Robarts: "expenditures for the construction of secondary schools rose from $39,169,000 in 1960 to $81,611,000 in 1963" (Fleming, 1972a, p. 20). See also Gidney (1999, pp. 49-52) concerning the advent of the consolidated school boards and larger elementary schools of this era.

and 8 were also to be rewritten to prepare students to fit into any of the three branches when they reached grade 9.

To create and implement these new guidelines, Robarts again broke with the precedent of isolationism set by Dunlop. He was too politically savvy to ignore the shadow committees rising out of the ashes of the Porter Plan. Growing in strength and resolve, several university and teachers' committees finally united with the founding of the Ontario Curriculum Institute in 1961. With this body, the Department faced the threat of an independently controlled agency (on which the Department had minority representation) which was making overtures at usurping official responsibilities (see Fleming, 1972e, chapters. 11, 12 and 13). One of the first OCI sponsored reports in 1961 indicated a deep dissatisfaction with the way the Department had constructed and revised the curriculum in the past. The report, edited by Northrup Frye, claimed that the existing method consisted of "slow deliberation by Departmental officials interspersed with sudden and hurried consultations of an *ad hoc* group of active teachers" (p. 84).[7]

Well aware of the Department's exclusive curriculum design policies of the past, Robarts attempted to pour oil on the water by seconding educators, university scholars and educational critics (many of whom were members of the OCI) in the creation of the new subject guidelines. Numerous courses were created in a fairly short span of time related to science, technology and vocational training. The creation of the new Math course was an especial success. J.F. Kinlin (who became responsible within the Department for Mathematics) wrote that this was because Robarts allowed the creators to think of the elementary and secondary system as a whole. As the

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[6] From an address at the official opening of the George Henry Secondary School in North York on January 27, 1966.

[7] This assertion is supported by the Fleming (1972d) who noted that "curriculum changes initiated by the department during the late 50s and at the beginning if the 60s were numerous enough in one sense, but they tended to be of a rather minor nature. The lack of emphasis placed on this phase of the work was demonstrated by the fact that a much larger proportion of staff time was devoted to supervisory activities than to curriculum development. New courses of study were often assembled in a very brief period of time with no pretense at the kind of research or development work that might have led to real innovations" (p. 193).

decade wore on, Kinlin mentions, his position became the lightning rod between the Department and many outside associations in the curriculum field. Specifically, he sited his negotiations with the Ontario Math Commission to enable Department agents to be members.[8]

Winning great acclaim for his financially beneficial relations with the Federal Government and political savoir-faire, Robarts was offered the post of Premier in November 1961 when Leslie Frost retired. Soon realizing that he could not effectively run both positions, he chose one of his trusted supporters, William Davis, to replace him as Minister of Education. For the first half of the 1960s, Davis closely followed and extended Robarts blueprint. Over these years curriculum design soon ceased to be an activity engaged in by a handful of departmental officials and created over a weekend as it had been in the past. Rather, it became a more widespread and democratically engaging activity. To accomplish this, Davis surrounded himself with like-minded Directors of the newly created Program branch, each strengthened by a growing staff group who shared the same outlook. By 1964, the Department seconded 225 participants to sit on 19 curriculum committees to complete course outlines (Annual Report, 1964, p. 11). According to Fleming, Davis had worked out a plausible line of demarcation between responsibilities:

> The OCI was to work out basic principles of curriculum and conduct only limited experiments to test the feasibility of certain ideas, while the Department was to retain the sole power to prescribe courses of study and to determine when, where, and to what extent an innovative procedure was to be adopted. The line of demarcation was, however, thin, and to some officials the department seemed in danger of being reduced to a position of issuing prescriptions in a mechanical sort of way. Departmental officials made sure that this danger did not materialize by performing their functions in a much more thoroughgoing manner than had characterized any previous period. (Fleming, 1972a, pp. 195-6)

Perhaps the most influential change in this period was the Department's outlook on "change" itself. While under Dunlop, departmental courses of study were developed to last for a

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[8] In 1966, Kinlin wrote in the Ontario Mathematics Gazette ("Eight years in mathematics with the Department of Education", iv, 2 March, 1966) that although there was much previous discussion under Dunlop, a change

generation, by the early 1960's the idea became accepted that guides would be for a short duration only. Indeed, one of the pillars of Davis' program became "the establishment of procedures for continuous curriculum reform" (Fleming, 1972a, p. 232). Guidelines were henceforth to be subject to continual examination, trial and revision.

Features of the Period:

Unlike the earlier programmes of study, no unified document exists for this period. Rather subject guidelines emerged in a piecemeal fashion to gradually replace Curriculum I:1. Thus, a new Science and a new Guidance programme were released in 1961, History and Geography in 1962, Math in 1964, Physical Education and French in 1966. The English curriculum was a continuation from the previous period.

Analysis of Dimension A: Elements Used in Integration

This Dimension A stands in stark contrast to any previous periods, both in its single-minded choice of certain elements and in its total disregard towards the existence of others (see Charts 4.1, 4-1E). Unlike Period 3, no balance is achieved or even attempted by the authors of these curricula.[9] Simply deciding that the transmission of content and academic skills was the sole purpose of education, the Department makes only incidental mention of practical/manual skills, social skills, and individual development. While they may be facets of life, the Department had obviously come to the conclusion that it is not their responsibility to deal with them. As a bi-product, Underlying Principles is artificially boosted during this period due to the authors' almost zealous promotion of the "scientific mentality."

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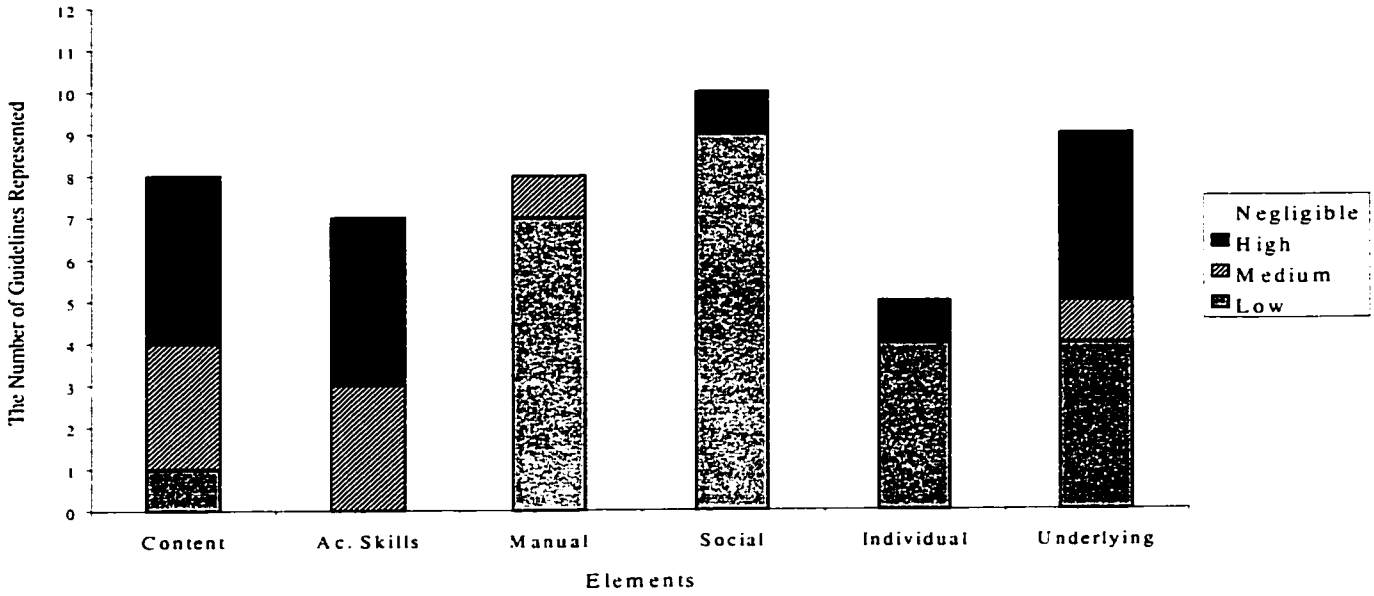
only happened in curriculum construction, distribution and implementation since Robarts had become Minister.

[9] It cannot be called a "programme" or even a curriculum as no attempt is made for a unity of the subjects.

Chart 4.1 - Dimension A (The Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

Subject Unity Finally Paramount

Throughout this period, the Department appears to see the course of studies as a unified, balanced system of Arts, Humanities and Sciences (4D-3). However, in their minds, unified does not mean highly "inter-disciplinary". The subject areas are considered by the curriculum designers of this period as consisting of fairly separate bodies of knowledge, each with a distinct flavour that must be maintained for it to work properly (4C-15, 4C-16). Fitted together like a jigsaw puzzle, the curriculum then becomes a whole, interlocking system. Cross-over of content and skills does happen at points of contact and must be exploited for efficient teaching, but to keep the system of dissemination flowing effectively, separation of subjects must be retained and enforced. While to students, connections might seem unclear and subjects areas isolated (see 4A, 4H, 4I), all the pieces will fall into place – theoretically – by the time of graduation.

Student-Centred Integration Lost

Although some lip service is paid to student-centred education, by and large, students, their individual difference and their interests do not figure into the curriculum equation. The school's purpose is to disseminate a body of knowledge in an efficient manner. To give students any control of this process would simply impede this objective. Robarts expressed this view to the Legislative Assembly in April 1962 when he said it was his own personal opinion that there should be a "stiffening" of the course of study. While not as vehement as Dunlop, he attributed the lack of challenge to "a hangover from what might be referred to as Deweyism or progressive education." With the load getting heavier at the secondary level, he concluded that elementary students could no longer "teach themselves".[10] This continual juxtapositioning of illusion and reality is played throughout the curriculum documents. While maintaining the front that students are important, the Department eliminates or mutates most of the child-centred activities used in the past. For example, while experiments are promoted in Science, they bear no relation to the child-centred enterprise. They are merely the replaying of experiments preplanned by curriculum developers and the teacher (4C-13 to 4C-22). Similarly, while the "discovery approach" is promoted in Mathematics, it is highly regulated (4E-6). Drill and over-learning are promoted in French (the only concession the document makes to student interests is that teachers should try not to make it too monotonous). It states clearly that school is there to challenge children - not to entertain them (4H-10, 4H-11. 4H-14, 4H-16).

The reader is momentarily stunned by Guidance's assertion that each child has intrinsic worth (4B-2), so out of step with this period's philosophy. However, the authenticity of this statement is immediately thrown into question when the document further asserts that there should be a "recognition of the child as an individual with problems" (4B-4), and that it is the Counsellor's responsibility to be in charge of finding solutions (4B-7). This mentality is seen in

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[10] Ontario, Legislative Assembly, *Debates*, 26th leg., 3rd sess., 10 April, 1962, pp. 2165-6.

almost all guidelines. While the History/Geography sections tell teachers that students should reach their own conclusions and generalizations, they also say that it is the teacher's role to carefully shepherd the students to "proper ends" (4D-4, 4D-8, 4D-9, 4D-28, 4D-31). Similarly, the Department encourages Music teachers to guide the student to enjoy musical experiences for its own sake, not for feelings of self-expression (4I-2). The biggest turnaround can be found in the Home Economics course. Whereas in the last period, students were allowed to collaborate with the teacher in designing and evaluating the course, all student choice has been eliminated in the present document (see 4F).

The Façade of Social Continuity

Although there is some mention of the importance of social stability and the role that students should play in the community and the nation, these statements remain as general admonishments, usually at the beginning of each document. Outside of this, however, there is no real effort on the part of the Department to integrate this sentiment into concrete expectations or examples within the coursework itself.

Change Underlies the Department's Actions

Although the importance of social change remains implicit in the language throughout the documents of this period, it rests under the entire curriculum like an iceberg. In actuality, the whole purpose for reforming Curriculum I:1 was in reaction to perceived changes that were going on in the world at the time. The creators of the guidelines, especially in Mathematics and Science, felt that new knowledge was surfacing every day, dispelling old ways of thinking. Alongside these new visions of science and technology was a "wider dissemination of knowledge by all the media of mass communication" (4C-3, 4E-1). So much new information was now entering the common sphere from all angles that the Department felt it necessary to find some way to properly decipher the importance of that information and ways that it could be channeled efficiently to the student. Firstly, it changed the curriculum's philosophy to meet the important

beliefs of the day - to include new math and science skills at all levels of school to prepare students to live in a "mathematized" (4E-1 to 4E-6) and automated culture (4F-2, 4F-3). Secondly, the Department dissected this new information into specialty bailiwicks so students could readily digest these sizeable chunks (4C-1 TO 4C-6, 4C-8 TO 4C-15).

Another new change, that of cultural inclusion, is barely visible in some areas of the curriculum. Physical Education tries to promote an understanding of culture through Folk dancing (4G-3), and French endeavours to promote bilingualism (4H-4, 4H-6). These two sentiments may be seen as harbingers for future revolutions in later periods.

Analysis of Dimension C: Loci of Integration

With all of Robarts' reforms to the curriculum, the general pattern of Dimension C did not change greatly from the earlier periods. The Department continued to believe that there existed a direct relationship between the Central authority that created and distributed the guidelines and the individual teachers who carried these policies out. The roles played by both the School boards and school administrators remained secondary. What Robarts did accomplish (for whatever original reason prompted it) was to extend the number of voices being heard at the Departmental level. Up to now, curriculum design had always been undertaken by a handful of generalists. At the beginning of this period, with the programme being splintered into various subject areas, a large number of experts (mostly from the OCI) were seconded to more accurately reflect contemporary thought. In the past, most curricula had been created from theoretical constructs and distributed to teachers. What was indeed revolutionary about the work of these specialists was that they applied more inductive methods. In the Mathematics guideline, for example, "some informal experimental work" was undertaken in 1959 and 1960, whereby 36 schools used it in a pilot project "to determine the value of this modern treatment of

Mathematics". A success, Robarts announced that "future years will almost certainly see the continuation of this experimental work in high grades" (p. 11). By the end of this period, the Departmental structure had burgeoned to include many new substructures to systematize the curriculum process. Yet, it remained the policy of the department to keep the deliberations of curriculum committees confidential until the courses of study were actually distributed to the teachers.

Analysis of Dimension D: When is Integration possible at Grade 7-8 years?

During the opening of George S. Henry Secondary School in North York Township in 1966, Premier Robarts stated that "it is our declared policy, as you know, to integrate the elementary and secondary aims of our schools system into one process which itself will be projected in a continuous sequence to embrace post-secondary education both in universities and in other directions" (John Robarts Speeches, R.G. 2, p 3, Public Archives). It is true that more than ever, Grades 1-13 were seen as a lock-step process. However, certain barriers were maintained. The curriculum set-up of Curriculum I:1 was not only maintained but strengthened. Many prescribed facts could only be taught at a certain grade level. Lastly, the tone of the new documents was obviously geared for an audience that was heading for higher levels (and certainly not reminiscent about earlier childhood grades).

Analysis of Dimension E: Integration Methods/Approaches

Primary Forms of Integration

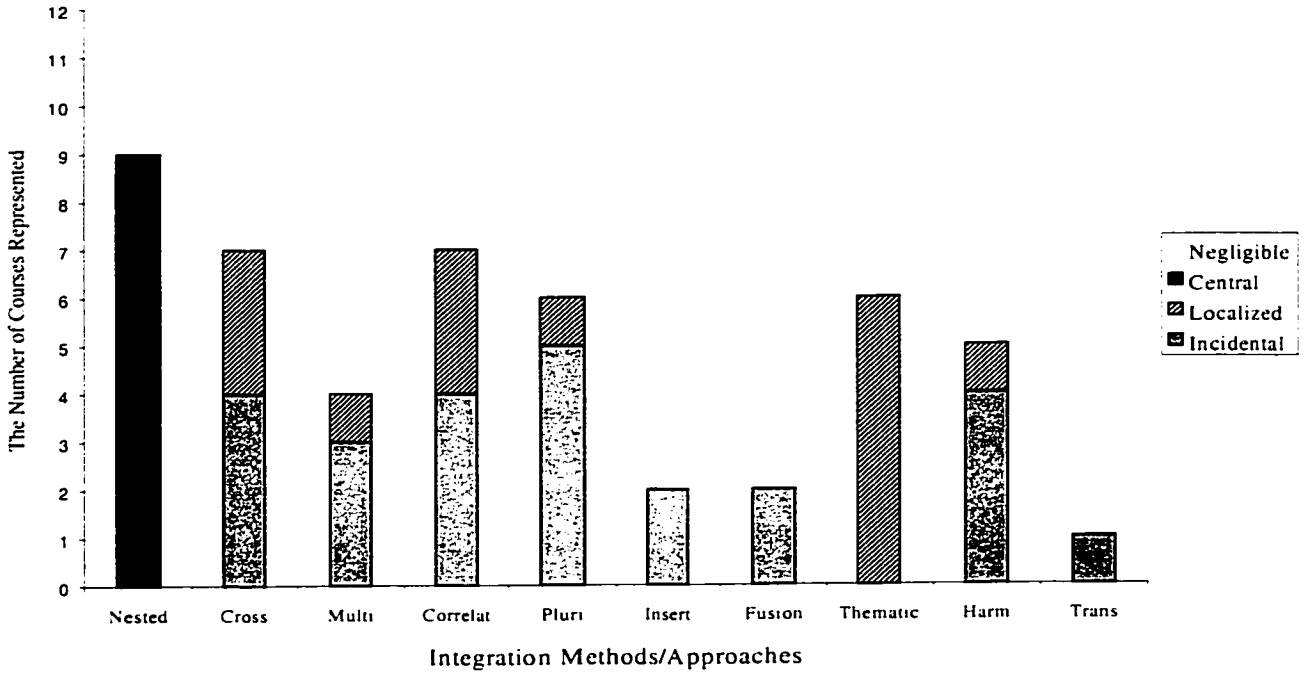
The first and foremost approach to integration throughout this period is *Nested*. It is the only choice that meshes with the philosophy of the Department at the time. With the belief that all subjects must be seen as separate entities within a system, they cannot logically be combined in any other way. Within each subject, the authors instruct teachers to organize the course in a sequential, logically built fashion, going from known to unknown. This is especially seen in History (4A-7, 4A-9, 4A-11, 3A-12, 4D-22 to 4D-26, 4D-30, 4D-38), which is organized in a chronological manner, trying never to repeat itself. Similarly, Mathematics is said to fit into the grand scheme of things within the curriculum and must take an important position (4E-1). Because of the specialized information and skills to be transmitted to the students, however, it could not be integrated with other subjects, and it did not even enter the minds of the designers to broach this issue. Rather, they recommended that teachers must use the time allotted to them more efficiently, combining Math topics together or pushing down grade levels (4E-3). Subjects, therefore, are to be taught in a unified progression over the grade levels, known to unknown. (4C-7, 4G-6, 4D-23 to 4D-26) Reminiscent of earlier programmes, Science is said to be an umbrella term for several sub-disciplines (4C-2, 4C-4). However, little is said about this aspect.

Localized Forms of Integration

While bearing little resemblance to earlier attempts, the ***Thematic Approach*** is used in a few subject areas. Physical Education, History, Geography and Science make use of theme-like units to drive forward the momentum of the course. However, unlike the now defunct Enterprise method, these units have all been pre-designed by the Department. Teachers seem to be instructed to just carry out the instructions, allowing students to undergo the transmission of knowledge. Any Student-centred activity around this method is sharply curtailed.

Crossdisciplinary activities are used at a more implicit level and the more general English-Across-the-Curriculum approach is not really mentioned. Rather, English is used for more subject-related purposes. Each subject seems to have a dialect - Geographical English (4D-12), scientific English (4C-15), and mathematical English (4E-5). A few other cross-overs exist such as geographical history (4A-10), but little else.

Chart 4.2 - Dimension E (The Importance of Integration Methods/Approaches)



Incidental Forms of Integration

Correlation is vaguely mentioned as a way of linking the now dismembered social studies sub-disciplines. As well, some attempt was made to juxtapose certain course materials as part of a grand scheme: Home Economics is said to fit between Arts and Sciences (4F-5), Physical Education is shown in relation to other areas of the curriculum (4G-3), Science to Agriculture (4C-20), and it is instructed that Health should not be isolated but taught across the

curriculum (4G-6, 4G-10). However, these are mentioned in almost an off-hand way and are not followed up with any concrete suggestions.

Because of the Department's general and nebulous use of language, it is unclear if it is suggesting that teachers should organize some way of linking their courses for team teaching or team organizing purposes in dealing with Health (4G-10), thereby making it ***multidisciplinary*** (a similar situation mentioned in History/Geography). It can also be interpreted as a Health program, making it more of a ***pluridisciplinary*** approach. This situation, therefore, must be left in a limbo-like state.

Analysis of Dimensions F & G: Implementing Curriculum Integration

For the first time in its history, the Department tried to systematically test and implement its new guidelines throughout this period, rather than merely disseminating them to the teacher. If the Math curriculum is any example, the new documents were constructed by a group of experts, and then pilot tested in schools for feedback and adjustment. In announcing each new guideline, Robarts reiterated his policy that broad time limitations (or in some cases no limits) would be given to individual principals, school boards and inspectors for the implementation of new course guidelines. Incremental introduction of new material (i.e. beginning in Grade 7 in 1961, Grade 8 in 1962, etc.) was intended to further ease the new content requirements. Special in-servicing was offered to Inspectors so they might help teachers in understanding the subject. Moreover, investigative committees were established to review proposed curricular revisions and to report upon the reaction to their implementation.

While it must be acknowledged that the process prescribed by the Robarts Administration to implement the guidelines was quite effective at the time in disseminating the guidelines with little complaint from the teachers, it did not do much to aid curriculum integration. In fact,

because of the Department's belief in the specialized subject curriculum, it actively encouraged factors that would inhibit any form of integration beyond the nested approach. The problems associated with Subject Attachment and Balkanization are not considered an issue, while it is implied that the new efficiently dismembered curriculum would ease any overload (because each teacher would focus on their own particular area of expertise). Compared to each of the earlier curriculum innovations, this approach was considerably more open and sensitive to potential implementation problems and did more to facilitate successful adaptation to the new curriculum. However, the focus of the Department is to generate a greater understanding of the guidelines by all stakeholders so that they may be more efficiently transmitted to the student. This is demonstrated by the Department's choices in Dimension G. All central factors chosen had to do with increasing the efficient flow of information from the Department to the teachers and an acknowledgement that they had received it clearly. However, all factors related to increasing a voice among the various stakeholders were de-emphasized or ignored.

Overall Remarks on Period 4

The changes to the curriculum during this period can be seen as a natural extension of the Department's new philosophy foreshadowed in Period 3. It had become clear that "curriculum" was now defined as a body of knowledge generated by departmentally seconded committees to be inculcated to students. Based on this premise, the following inferences can be made in regards to the Department's actions.

1. Shift from *Humanitas* Model to the Scientific Model of Integration

The changes of this time can be viewed as a microcosm of events that had been taking place in Western society through the greater part of the century. Until this time, educational philosophy had always been most highly influenced by the humanities and Liberal Arts. To this

mentality, the curriculum was seen as almost an organic body, one and indivisible. Integration was more than just finding connections, therefore, but in bringing the body together to find meaning and purpose for the student. The ultimate objective here was to create the paideia – the all-round "good" person and citizen. The changes that Robarts made allowed the Scientific-Cartesian Model to usurp this worldview. In doing so, child-centred education ceased to be the guiding force (see Period 3 & 4, Dimension B), the vacuum filled by a desire to see the school system run with efficiency and accountability.[11] No longer showing any great concern for individual development or social skills (see Dimension A), what becomes important is that the student know a certain amount of information and skills in a prescribed amount of time (13 years – see Dimension D) so that he will be properly trained for work (presumably in a scientifically related profession).

2. Most forms of Integration and Accountability Don't Mix

Based on the Cartesian Model, therefore, the Department viewed the Ontario School System in a mechanistic way with the curriculum being the input and educated students the output – content was the medium with which to work. In an effort to ensure quality and pinpoint where problems lay (e.g. students having trouble with writing), the content was subdivided into small courses (with even smaller units) to be delivered to the student at specific times. To do so, it widely dis-integrated curricular programs. The new guidelines for Math, Science, History, Geography, and French were framed in an almost completely disciplinary manner. Guidance, Home Economics, and Physical Education (the Health component) admitted a degree of integration with other subject areas. However, compared with earlier guidelines, even these subjects were more entrenched in their own specialty bailiwick. To cross the information

[11] This is borne out by much of the administration literature of the time. See Simon (1957), Gouldner (1954), Hall (1962).

between the periods on the time-table was just to "muddy the waters". This can be seen in some of the most dramatic changes made to the curriculum at this time:

Guidance is a good example of the trend toward disciplinarity. No longer are guidance duties shared by all teachers, but delegated to a trained counsellor. Teachers are encouraged to specialize in their own area of expertise and disseminate guidance information only when it touches their area (4B-4, 4B-5). The counsellor has her/his proper place in the body of the curriculum for vocation, teaching how to study the other subjects, etc (4B-7, 4B-9, 4B-10).

The Dismantling of Social Studies best represents the Department's intention to dis-integrate the programme. Concluding that the course was too vague a combination of subject areas, and that its aims had become muddled, the Department returned to the pre-1938 practice of separating History and Geography into two distinct disciplines, each with their precise area of interest and aims. While the authors of the two guidelines still tried to reassure teachers that the two subjects would run in parallel (4D-27), it becomes clear even with a brief scan of the document that neither History nor Geography are designed to interlock in many ways (4D-45).

3. From Generalist to "Factory Worker"

Alongside the changed curriculum, the teachers' job description had to be transformed to meet this new paradigm. With the new importance placed on content (and such an increased amount of it), and the "transmission" model for teachers promoted by the Department, it was no longer acceptable for a teacher to simply be a generalist. It was not the teacher's responsibility to be concerned with individual development (unless you are the guidance counsellor), social skills, or practical skills (unless you teach a vocational subject). It was much more productive for a teacher to specialize in one aspect of the curriculum and teach that (Dimension C). By the end of the decade, Lloyd Dennis referred to this arrangement as a "pickle factory" (see Gidney, 1999, p. 77)

4. The "Specialized" School

For specialization to occur, schools had to become enlarged to accommodate 8 specialist teachers. To enable this process to happen, of course, the small schoolhouse system had to be destroyed and replaced by the more efficient regional system. For even more efficiency and accountability, the strict grade system was instituted (Dimension D). The one area where integration and efficiency overlapped was in a multi-grade nested approach – specialized teachers could spread their knowledge over several grades and teach many levels.

5. Efficient Implementation

Robarts' methods allowed this new philosophy to be accepted by almost all stakeholders over the span of this period. This was first due to the *spiritus mundi* of the time – most educational scholars, academic theorists and the media considered the scientific model *de rigeur* by this time.[12] It was therefore much easier for the Minister of 1960 to sell "new and improved" to the public than it was for the Minister of 1955 to sell a return to the ancients. The success of these new documents can also be attributed to Robarts' (and Davis') politically savvy maneuvers. Instead of one monolithic change to the Programme of Studies, reforms were made piecemeal, subject by subject over several years. Such an incremental approach to curricular reform allowed the Department to install a more organized and detailed approach to implementation, and a feeling among all members of society that steady change was happening (but not at breakneck speed). Gone were one-year deadlines for implementation and coercive evaluation techniques. Instead, the Department granted more authority and leniency to principals, school boards, teachers, and inspectors in an effort to gain their support and to avoid superficial, temporary implementation. Overall, a broader spectrum of stakeholders was pinpointed for active (or at least passive) solicitation of their support. Students (being viewed as the finished product),

[12] In the late 1950s and early 1960s, organizational theorists were driven to create more scientific methods for business and educational administration. The seminal works of this "Theory Movement" include, in particular,

however, had lost all opportunities for selecting or directing topics and themes in their courses. While the Department was extremely sensitive to problems that might arise from lack of proper resources etc, one does get the impression that it viewed the system more as a machine that was being tinkered with.

The overall success of the Robarts vision in reforming Ontario education was a qualified one. The new courses appear to have been effectively and thoroughly implemented in a fairly brief span of time. New, bigger schools were built across the province and training in Science and Technology expanded manifold. This was perhaps the bleakest period for curriculum integration. While examples of certain forms existed (specifically the nested), the setup and implementation of the guidelines in fact promote a dis-integration of the curriculum. However, resistance would arise from parents and other interest groups to protest the inflexibility and one-way transmission of a still essentially centralized system. Thus, by the mid-1960s it became evident to the Department of Education that further curricular change would be necessary, and that such change would have to embody a renewed concern for the rights, interests, and needs of the child. The almost exclusively subject-centred approach would have to be tempered in future programmes.

Halpin (1957), Griffiths (1959, 1964). For a short history of the movement, see Chapter 3. "The Theory Movement: Past & Present" in Evers & Lakomski (1991).

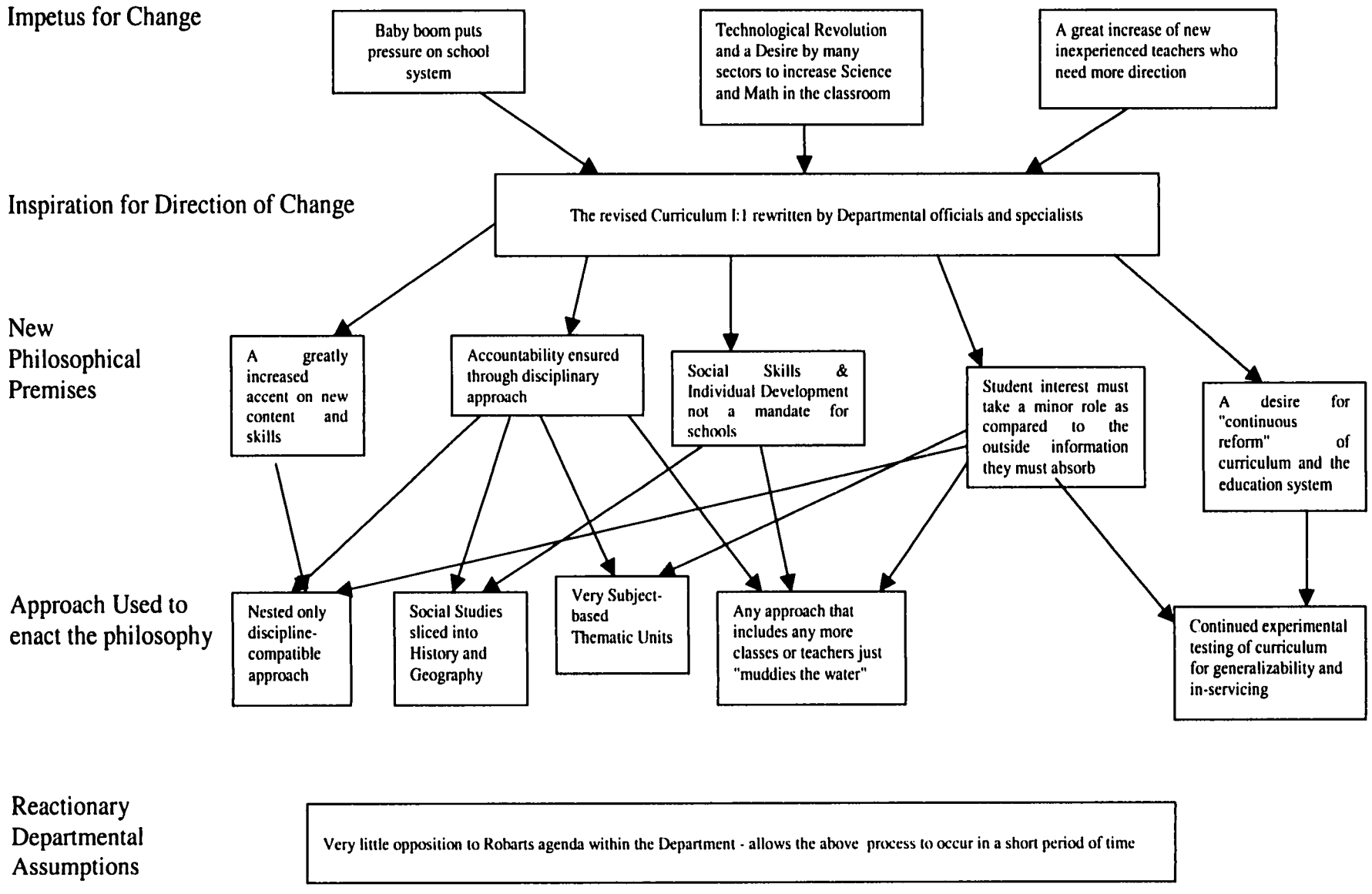


Diagram 4 - Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 5

"The Davis Curriculum"

1967-1974

Context of the 1967-1974 Curriculum

Student revolts in Paris, protests across the United States, and the sudden influx of a multitude of alternative schools all demonstrated the changing mood of the public towards education during the second half of the 1960s.[1] This heightened social awareness promoted democratic freedoms and egalitarianism for all sectors of society (even its youngest members), while a myriad of books emerged at this time resurrecting and adapting the benefits of the child-centred approach to education. Scholars such as Piaget (1967) and Bruner (1963) disputed many of the previous held claims of traditional education in favour of "themes", "interdisciplinary units," student-directed learning, the development of affective as well as cognitive learning, and other revolutionary concepts. Again, events acted out in the Ontario educational system make sense in relation to these changes. Public opposition to the Robarts' reforms focused on its "undemocratic" aspects, especially the streaming of students into certain courses of studies, and then segregated them for the rest of their stay in school.[2] Closed policy creation limited to "specialists in their field" further offended principals, teachers, and school board officials. In short, there was increased demand for individual freedom of choice, flexibility and participation. The Department, like most public education bureaucracies in Western Europe and North America, now had to make concessions to these new ideas and methods if it intended to maintain its reputation with the tax payers and its students in the public education system. The swiftness of change that took place in Ontario, however, can be greatly attributed to the abilities of the new Minister of Education.

By 1965, Bill Davis had found his sealegs and proved to be unlike his predecessors.

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[1] While A.S. Neill's *Summerhill* (1960) entranced many people in Europe and North America, privately funded Open and Free schools were founded in ever increasing numbers throughout the last 1960s and early 70s.

[2] Media figures were especially vocal in their disapproval. One of Robarts' greatest gadflies was the *Globe and Mail* columnist J. Bascom St John. See especially "A proper job in revising the Curriculum," (3 December 1962) and "Piecemeal Course Revision" (4 December 1962).

Drew and Dunlop had been characterized by their inactivity and intransigence to change, while Porter and Robarts had had varying degrees of success at pushing through rapid solutions and then retreating to their own political ambitions. As described by Fleming, Davis appeared to strike a balance:

> Davis is profoundly convinced of the importance of education - and education of a particular kind. He encourages every move to give pupils and teachers more freedom, more responsibility, more chance for constructive initiative. He backs every development that promises to make school experiences more humane, more stimulating, and more in tune with the positive features of modern life. ... Although he displays far more sympathy with student activists than many officials particularly appreciate, he tells the extremists among them with firm conviction that society, despite its defects, is not rotten and corrupt. (Fleming, 1972d, pp. 28-29)

While earlier administrations had called for a further strengthening of the Department's control over the various aspects of a highly segmented educational system (especially in terms of curriculum), Davis, in accordance with his philosophy, felt that this had led to a popular perception that the Department was remote and unresponsive. As Gidney (1999) mentions, this new philosophy and the actions that brought it to reality must be attributed as much to a number of newly appointed bureaucrats (especially J.R. McCarthy) as to the Minister himself (see especially pp. 66-67 concerning this issue). In particular, the Department began to recognize an underutilized but very important stakeholder base – if teachers and local administrators felt no ownership in the education process, it was surmised that there would be a general apathetic malaise overlaying the entire system.

Davis' first act to fulfil his vision was to restructure the Department in January 1965 to more accurately reflect his "three guiding principles: integration, reallocation and decentralization" (Report of the Minister, 1965-6). Most importantly, Davis announced the creation of several regional offices to deal with local issues and provide resources in the field.[3] Fleming (1972a) saw this as indicative of "his determination to transform the Department from a

primarily regulatory to a service agency" (p. 80). This is also reflected in Davis' decision to withdraw from the Department's offices in the Mowat Building and move to Queen's Park. This would almost completely extricate the Minister from the routine duties of head bureaucrat, mutating his role wholeheartedly to educational statesmanship (as the Hope Commission had recommended 15 years previously). His absence would be supplemented by the creation of three new Assistant Deputy Minister positions (in charge of "Instruction", "Provincial Schools & Further Education", and "Administration" respectively), whose jobs would be to coordinate the various branches and work of officials, interpret policy, make decisions on certain matter, and pass some on to the deputy minister. New branches were further created to deal with the expanded role of the Department. To overcome this burgeoning bureaucracy, Davis advocated a substantial increase in the Government's "investment in communication".[4]

During this period the most crucial decision-making powers in regards to curriculum became the purview of the newly created Program branch (a sub-division of the Instruction division). However, it was made clear from the start that it would act as a director of curriculum creation rather than as the sole designer. Making this change explicitly clear during a speech in the Legislature, Davis stated:

> The day has passed when curriculum revision can be considered a matter of assembling subject specialists to issue new courses of study. The 58,000 teachers in the Provincial system, who are the key to the implementation of any course of study, must be involved at several stages. The Department has made a beginning in providing leadership in this process. During the past year workshops and familiarization sessions were held throughout the Province in the subjects of Mathematics and in History and Modern Languages -- projects that involved the cooperation of several Branches in the Department. It is expected that this phase

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[3] Specifically, regional offices were established in Port Arthur, Sudbury, North Bay, London, Waterloo, St Catharines, Kingston, Eastview and two in Toronto in the years 1965-6.

[4] To rectify its public image and to disseminate the newest curriculum information for teachers, parents, and other interested parties, the Department created an *Information Branch* (under the direction of Administration). It came to be in charge of press releases, publications, and a newsletter entitled *Ontario Education News* (changed to *Dimensions of Education* in 1968)

of curriculum development will receive increasing emphasis in the future.[5]

Further described in Dimension C, the Davis administration instated numerous and active curriculum committees, which included a wide range of people from professors, teachers, supervisors and inspectors, to teacher's college staff and departmental officials. The Instruction Division (later named the Curriculum Division) was responsible for coordination between districts, for research and for assistance in the form of consultative services, proposals and new ideas for curriculum development.[6]

Under the influence of a new "progressive" staff of curriculum specialists[7], Davis became convinced that alongside the new policy of decentralized curriculum creation, sweeping and comprehensive reforms were necessary to the general philosophy of public education. To this end, the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, was struck on June 2, 1965 with a mandate to assess the state of education in Ontario and to recommend methods for revising the elementary division. In the spirit of collaboration, the twenty-five member committee met with numerous interest groups, parents and teachers over the next 2 years. While these various stakeholders acted as good sounding-boards and did much to temper the more radical proposals of the committee, it should be noted that many of the report's

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[5] Legislative Assembly, *Debates*, 28th leg, 4th sess. 21 February 1965, p. 913. This is reiterated by H.E. Elborn (an Assistant Deputy Minister) in an address to the Thunder Bay Teachers' Institute on 22 October 1965 (see R.G 2, File 175, Ontario Archives)

[6] This was hailed by local media as a much needed reform to the system. A good example can be seen in the *Sarnia Observer* (10 June 1968).

[7] In 1966, Davis appointed J.R. McCarthy, a protegee of Stanley Watson (co-creator of the 1937/38 Programme of Studies) as Deputy Minister. McCarthy had been well trained in the progressive approach by his mentor and was a strong advocate for teachers' freedom in the choice of curricula and textbooks. He denounced the tyranny of external examinations and, in general, opposed the imposition of unnecessary restrictions and regulations of all kinds. He favoured decentralization of departmental powers and the maximum encouragement of local initiative and responsibility. See especially his address "curriculum crossroads" to the Ontario Association for Curriculum Development (*Proceedings - Conference on Education*, Windsor, Ontario November 1961, p. 90). Other departmental officials such as M.B. Parnall, J.K. Crossley, and J.F. Kinlin shared similar views and managed to actually play strong roles on the Hall-Dennis Committee (see Gidney, 1999).

basic premises stemmed from fact-finding missions abroad. Of especial importance were memos that pleaded with the committee to make changes that reflected the philosophy of Britain's Plowden Report (please see Dimension C for more details).

Surrounded by much fanfare, the Hall-Dennis Report was publicly submitted in June, 1968 (see Gidney, 1999, pp. 75-82 for a detailed summary of the report's main findings). In brief, the Report called for a refinement and elaboration of the 1937 Programme of Studies. It advocated an "individualized programme of instruction for the development of the potentialities of the child", the "removal of corporal punishment", and the "de-emphasis of competition in the classroom". School, declared the report, should be "viewed as a place of personal growth and development based on a learning process of self-discovery" (p. 9). Finally, the Report formalized the Department's incremental return to a centrally integrated curriculum, both horizontally and vertically. It called for the replacement of the present system based upon rigid expectations, segregated grades and subjects with the introduction of a system of education revolving around the individual needs of the student, with a minimum of supervision and guidance. As such, the process of education was seen by the report as a continuum, and for the first time since 1949, grades 7 & 8 were reintroduced to elementary concerns (see Dimension D).

While the public sat back to digest the Report, the Department readily applied its recommendations with enthusiasm and rigour.[8] Anticipating the committee's findings as early as August 1967, the Curriculum Division delegated curriculum creation to committees around 4 broad areas of study (rather than subject-specific): Humanities (English, modern languages, classical languages); Math and Science; Social Sciences (History, Geography, social studies,

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[8] Reaction was mixed. Some newspapers were quite unbridled in their praise of the document – see the *Toronto Daily Star* (13 June 1968), the *Telegram* (13 June 1968), the *Globe and Mail* (13 June 1968) and the *Montreal Star* (15 June 1968). Given time to think on it, others were more restrained and in fact disparaging of the report. The *Ottawa Journal* declared the report to be nothing more than "the philosophy of John Dewey, warmed over and revised by his latter-day disciples" (June 18, 1968), where the *Hamilton Spectator* regretfully feared that the report's abstract theories could never be applied in the real world (August 17, 1968). Daly (1969) further expresses these sentiments in his derisive text.

government and economics); and the General Group (Art, Music, Physical Education, Industrial Arts and Home Economics). Fleming (1972b) asserts that "The new arrangement was intended to meet the need for integration of certain aspects of certain subjects and to lay the foundation for a more flexible grouping of options in school programs" (see pp. 31-38). To encourage this, the Curriculum Division began distributing course outlines of a more general nature than in the past. These outlines would be merely intended to serve as a framework within which teachers working with their students and programme consultants could develop their own courses based on local needs. By 1969, this new "integrated" system was consolidated and fully linked. Four assistant superintendents on the Curriculum staff were hired to coordinate education as a continuous process through the present 4 levels of schooling (PJIS). In total, over 70% of the Committee's recommendations related to curriculum were implemented within the next few years.

After two years of experimenting with this approach, Davis pronounced it a success – in the future, he stated in his annual report, the vision of the department would embrace "...a decentralized curriculum, individualized programs and a multidisciplinary approach of learning." (Annual Report, 1969, p.2). For the next 5 years the Department embarked on a series of projects along these lines. Program consultants in the regional offices helped teachers with individualized programming, and as will be shown throughout this chapter, guidelines remained generalized to permit local adaptation. In fact, the Department even funded a number of experimental school configurations. Experimental Free schools were opened in Hillsburgh and Toronto, while Open Concept schools were being constructed across the province in attempts to find new ways of meeting the demands of the student.[9] For the remainder of this period a feeling of excitement and verve swept the Ontario educational community, pushed forth by a feeling of liberation from a prescribed curriculum.

Like Robarts before him, Davis reaped personal reward from successfully engineering this revitalization of the education system. In 1971 he accepted the premiership of Ontario, and appointed first Robert S. Welch (1971-2) and then Thomas Wells (1972-1979) as his Minister of Education. However, Davis' shoes proved difficult to fill as the initial high of "curricular freedom" began to be replaced by a sense of aimlessness and unaccountability.

Features of the Period:

Like the documents of the previous "Robarts" period, the guidelines of the "Davis" period were implemented in an incremental manner. Composed by larger curriculum committees than in the past and following the general findings of the Hall-Dennis Report as a guide, they were also much more abstract in nature. The order of appearance followed thusly: Guidance (1968), Art (1968), English (1969), Latin & Greek (1969), Basic Business Typing (1971), Consumer Studies (1972), Informatics (1972), Science (1972), Man, Science & Technology (1972), Music (1972), History (1973), Geography (1973), Physical Education (1973), Environmental Science (1974), and Family Studies (1974). As the distribution of these documents were targeted for a wider audience (namely parents and concerned citizens), they became more aesthetically pleasing – pictures and photographs were included portraying harmonious student/teacher relations, various learning activities in which students played an active role, and student artwork. It had become obvious that the guidelines were no longer merely prescriptive instructions but broadcasting sales pitches for the public education system as well. The philosophy of Marshall McLuhan had been perhaps adopted – the medium becomes the message at this time.

*note - the Mathematics guideline is a continuation of the previous period

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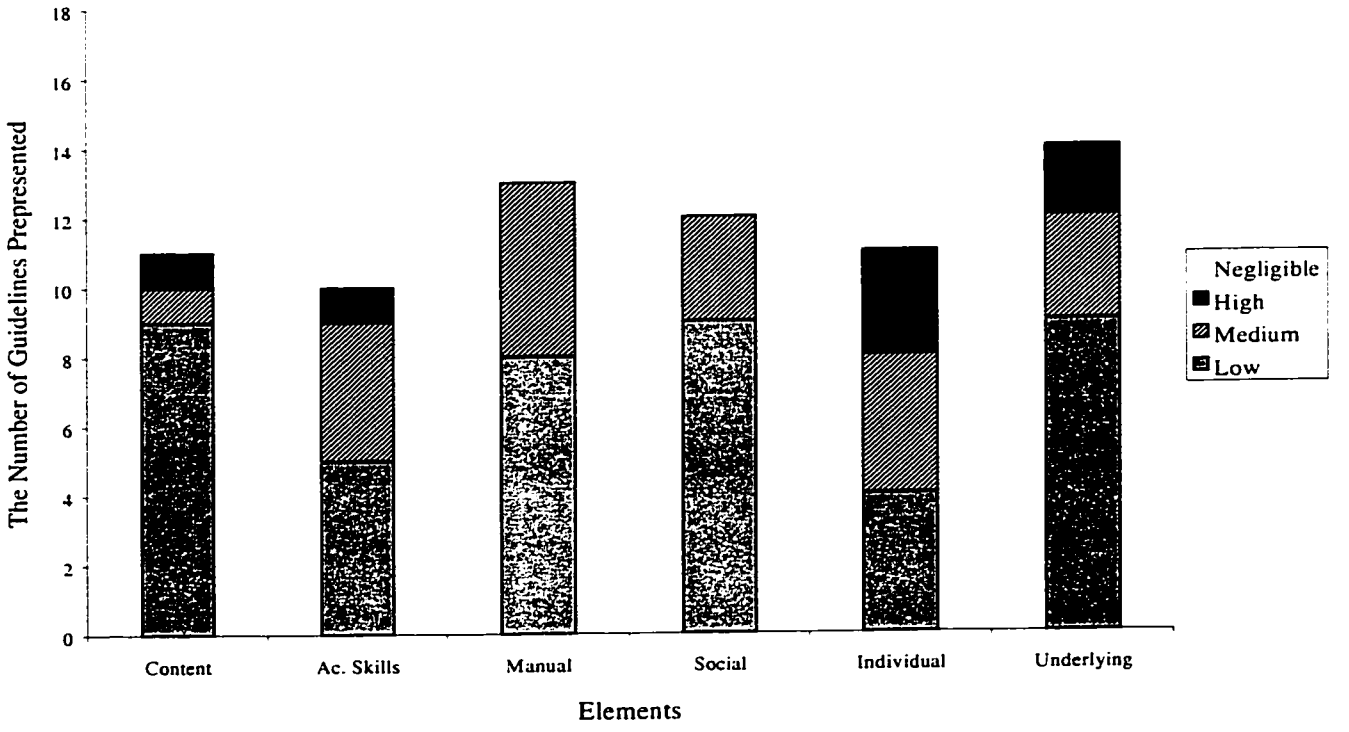
[9] In the early 1970s, the two "Free Schools" even produced a magazine entitle *This Magazine is About Schools* which outlined their philosophy and gave reminiscences about life at the school. As shown in Part II of this study, one of the schools, founded in 1973, is still based on the Open School concept.

Analysis of Dimension A: Elements Used During Integration

Clearly, the authors of these guidelines were concerned with one form of integration above all others - Individual Development. While other forms are present, they must be viewed as secondary. Content is largely ignored or downplayed throughout, while the integration of academic skills in areas beyond their subject-related courses is not highly promoted. Manual skills, especially its sub-component "relevance", has made inroads due to its interrelationship with Individual development. However, Social Skills and Underlying Principles tend to suffer for the same reason. This is due to the fact that both represent a certain amount of indoctrination - the first involves the socialization of the student, the second involves the inculcation of an external value system. Both are anathema to personal freedom and independent thought.

Chart 5.1 - Dimension A (The Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

The Return of "Natural" Subject Unity

Written like a passionate rebuttal to the preceding period, *Science* is characteristic of the Department's belief in the "natural" integration of the subject areas:

> A curriculum should have unity resulting from a coherent structure and continuity. Scraps of knowledge have nothing to do with education. There must be some sort of structure in the planning and in the development of the program. Any unifying influence need not be totally consistent across the province, nor even throughout a local jurisdiction. The curricular framework, however, must be clear to each teacher and logical to the boys and girls. (5I-17)

> Unless they are diverse, new courses will only perpetuate the current pattern of specialized courses in high school described by Leopold Klopfer as a "pale reflection of the traditional organization of science for the purpose of research, and of the departmental fragmentation established in colleges and universities for the purpose of training scientists in specific fields." All categories of knowledge should be taught and studied as interdependent, each with its own contribution to the web of insight, knowledge, and experience of youth. (5I-18)

Clearly, the term "unity", mentioned in almost all guidelines, has little to do with any artificially manufactured "programme of studies" by a centralized authority (as the later Curriculum I:1 documents had been). Indeed, the Department appears to have embarked on the destruction of the last vestiges of the rather rigid and outdated Curriculum I:1 (to be replaced by a set of 16 loosely constructed, independent guidelines) for just such a reason. While revolutionary, the new curriculum designers at no time endeavour to erase the lines between subject areas. To them, a truly integrated and meaningful curriculum can only stem from "natural linkages" between subjects, discovered and exploited at the primary stakeholder level.

While the notion of "Natural Linkages" had existed as rather vague notions in both periods 1 and 3, it is during this period that the Department refines and solidifies the premise, making it endemic throughout the curriculum. The basis of this philosophy was not dissimilar to Adam Smith's "invisible hand" of the marketplace, in that natural laws were believed to be at work. This is stated most succinctly in Art: "we have come to acknowledge the interdependence

of all fields of learning" (5B-6), and the "trend towards the correlation of all areas of learning" (5B-10). In line with this reasoning, subject committees designed the course as a framework rather than as a prescribed text. This was supposed to give much latitude for interpretation at the local level. It is further recommended by most guidelines that while internal consistency is important, courses should be organized into broad areas (5I-9, 5I-12, 5I-28, 5B-5, 5B-9a, 5K-8, 5O-6). English even warrants the mandating of large blocks of time to enable "teachers to examine the possibilities of melding all facets of the program into an integrated whole" (5C-9). In allowing for these wide parameters, the Department appears to have believed that certain subjects would be attracted to each other, thereby wiping out the perennial problems of "fruitless repetition" (5N-2), and the creation of a unified paradigm.

While each guideline does share in the belief that subjects should be linked, there is also a bit of a wobble in the opinions they formulate as to the specific linkages and the strength of one subject's pull over others. Physical Education makes fairly benign mention as to how it can help reduce overlap and enrich resources with Family Studies and Science (5P-6). Science takes this one step further. Based on its universal skills (5I-6, 5I-23), the guideline boasts that "Science overlaps all the other disciplines, hence allowance for some form of integrated study in the total school curriculum provides for a more natural development of an area of study" (5I-9). At the furthest end of the spectrum are the courses that discuss their pivotal roles in enabling a unified curriculum. Geography, for example, says that it holds a unique place as a lynchpin between the social and physical sciences (5M-1), while also having a foot in the arts and humanities (5M-2). Similarly, Family Studies believed it "can serve as a unifying force integrating elements of many disciplines within the curriculum" such as Art, History, Geography (5O-8). Finally, Art bluntly states that it is the one discipline that can effectively illuminate the interdependence of subjects (5B-6).

With all the varying degrees of "natural" mentioned above, there remains genuineness in their attempts, for they all do seem to adhere to the acid test described in the underlying philosophy: "the criterion of successful integration is its unforced quality" (5K-2). Some of the new optional courses appear to be driven more by political survival, however. They seem to make an especial point at showing some relationship to the core subjects. This can be seen in *Informatics'* strained linkages to unrelated areas of study (5H-5, 5H-5a), and in *Latin's* repeated arguments about its connections to modern society and other languages (5D-1, 5D-2, 5D-4, 5D-4a, 5D-4c, 5D-4d). A hint of desperation appears in both Environmental Science (5N-1a) and Consumer Studies (5G-5a, 5G-5b) as they state that even if they cannot stand alone as independent courses, some of its messages may be integrated into core courses.

Student-Centred Integration Returns to a Central Position

While the Department makes a strong argument in defense of subject unity, its most convincing statements can be found in the various guidelines' promotion of child-centred integration. Again, Science is especially eloquent in justifying the approach:

> Education can become a lifelong search for a comprehensive understanding in which there are no artificial compartments of school subjects. At times the subject Science should melt away completely so that a student may be able to study segments of his real world in a natural fashion. How can a student feel that he has freedom to do a scholarly study of Holland Marsh if he must stop at ethnic origins because that is history, or neglect contour lines because that is geography? (5I-16)

At the basis of this statement is a deep-seated belief in individuality. All students are unique (5A-2) – they all learn differently and should be allowed to master different talents depending on their situation (linked with their own development - 5C-4). It is anathema in this period, therefore, to enforce any uniform model of education. Rather, the objective of the education process must be to stimulate the student towards an interest in the development of and participation in his own experience. The designers of the guidelines decided on certain paths to achieve this end.

1. Teachers should create each program so that it meets students' needs and interests.

The intensity of this objective varies from course to course. Certain subjects like Informatics (5H-2), and Latin (5D-4d) give a simple nod in its direction. Others like Guidance (5A-9) and Art (5B-9a) make a more sincere effort to utilize integrated teaching methods in an effort to "answer needs of the adolescent" (5B-1). In the core courses this objective becomes more central. English, Science, History and Geography all make the leap and state that curriculum design should be created around students interests, differences and demands, and that teachers should experiment with new approaches, gauging them by student interest (5C-1, 5C-12, 5C-14, 5I-3, 5I-11, 5I-24, 5I-25, 5L-5, 5L-9, 5M-3). At the furthest end of this spectrum is Physical Education, which states that teachers should make personal assessments, then individualize the course to each student (5P-4).

2. Teachers should relate the learning experiences to students' lives

The belief in the correlation of student performance to relevance is one that hearkens back to period 1. In fact, a few course guidelines are more adamant than the 1938 programme ever was in promoting this link. Both Art and English warn the teacher not to expose the students to works of art or literature that may be out of their league (5B-4, 5B-8, 5C-7a, 5C-5; 5C-8, 5C-6, 5C-7b). The most zealous outlines remain Consumer Studies (5G-5a, 5G-6), Science (5I-8, 5I-13a, 5I-7, 5I-8, 5I-3) and Physical Education (5P-11, 5P-15), however. Each entreats teachers to set up the course and classroom to simulate real life and mimic students' lives outside the school.

3. The Link between Activity and Interest

This is another carry-over from the first period. If students are kept busy working on hands-on projects or other visually stimulating activities, the likelihood that they will become bored decreases and more learning is achieved. To accomplish this there must be enough flexibility built into the timetable so as to allow these projects to be completed uninterrupted by course and room changes. This admonition can be explicitly seen in Guidance (5A-7), Family

Studies (5O-6, 5O-7), and Art (5B-2, 5B-7, 5B-8, 5B-7, 5B-9b). Science likewise places great emphasis on the discovery method, allowing the students to experiment with active participation (5I-15, 5I-19, 5I-20, 5I-21, 5I-22, 5N-3)

4. Students should be collaborators in planning the course

This extreme aspect of the student-centred approach has not been explicitly seen before. Even the most liberal of periods in the past would not allow students such power over their own education (for fear that no learning would be achieved as a result). In this period, however, there seems to be a mandate by most outlines to attempt just that. The reasoning behind this command is that by allowing the students some control over the creation of the course, they will have greater interest and a sense of ownership. The Department, of course, does not open the doors too wide, and in many individual guidelines the steps taken are quite tentative. In some courses, a core of material remains with optional electives being offered to the student (5C-13, 5I-31, 5N-3). Guidance goes a little further, simply stating that the direction of the course should be dictated by student problems (5A-4) and interests (5A-11). Similarly, the Art course resurrects the old enterprise method, but replaces teacher assignments with student interest (5B-9d) - "he should be encouraged to discover his own line of exploration within the boundaries of the art program" (5B-2). However, certain course outlines are quite radical in relation to previous periods. English bluntly states that student collaboration should be the backbone of the course: "This inter-disciplinary approach necessitates much cooperative planning by students and teachers" (5C-10). This accent on joint planning is repeated in Latin (5D-4b), History (5L-12, 5L-14), Geography (5M-7), and Family Studies (5O-3, 5O-4, 5O-5, 5O-8).

What is truly unique in this period is the Department's ability to reconcile subject unity and child-centred integration together in one curriculum. Rather than considering them as inherently at odds with each other, the documents display how the two paradigms can co-exist

within the same framework, each with strengths and weaknesses. The same can be said about the integrated-disciplinary dichotomy: "We need a wisdom that integrates rather than a learning that divides. Clearly, there should be a place for interdisciplinary thinking as well as a place for studies among the traditional lines of the disciplines." (5I-169)

Social Continuity at Odds with the Mandate of the Period

Although weakly displayed, some of the curriculum documents point out that certain beliefs should be integrated into the program to promote social continuity. Many of the recommendations deal with the local situation, such as Guidance and Physical Education's plea that the courses should reflect the community's needs (5A-7, 5A-11, 5P-7, 5P-8). Other subjects make a wider, if more general case for promoting values that reflect Canadian society or that study cultural heritage. This is seen in most of the traditional Arts-Humanities related courses - Art (5B-3, 5B-9), Music (5K-2, 5K-3, 5K-4), History (5L-1, 5L-4, 5L-11), Latin (5D-2a, 5D-3, 5D-3a), and English (5C-6). On the whole, the general silence of the Department on this issue seems to be reflective of its struggle to come to grips with individual freedom within a society that no longer displays one unified culture.

The Curriculum Tries to Keep Pace with the "Changing Times"

Like in the previous period, the Department saw that society was going through a time of great upheaval. However, changes no longer included the isolated advancements of technology and science (although this is mentioned in Typing (5F-1), Informatics (5H-1, 5H-4, 5H-5, 5H-8), Man, Science and Technology (5J-1), and perhaps most importantly Science (5I-1, 5I-2, 5I-10, 5I-13b, 5I-13c, 5I-14, 5I-27). It also encompasses the realization that society itself is changing, becoming more complex. This is pointed out in Guidance (5A-5) and Consumer Studies (5G-1 to 5G-4) when discussing the changing world of occupational and purchasing choices. In keeping up with changes to private life Home Economics is replaced by Family Studies:

> It is thus apparent that Family Studies is an outgrowth of Home Economics in the schools of Ontario. The change in name is intended to convey the evolvement of Home Economics as it has responded to changing modes of fulfilling family functions and to changing roles of family members. (5O-2a)

At the same time, certain courses attempt to change students' mentality towards certain facets of the world around them. History says it will help the student deal with the changing cultures of Canadian society (5L-3, 5L-4a, 5L-10), while both Geography (5M-3, 5M-5) and Environmental Science show the student ways to "derive not only knowledge of his environment, but sensitivity to the relationships within it and a feeling of responsibility for the whole: in short, harmony with his surroundings" (5N-1).

Analysis of Dimension C: Loci of Integration

Perhaps the most revolutionary aspect of the changes to the curriculum during this period was the shift of decision-making power over the curriculum down the educational hierarchy. Ironically, this can be related to the Department's reawakened infatuation with British-style curriculum reforms. In fact, this renaissance can be largely attributed to one man in particular - M.B. Parnall, the head of the Program Branch. Unabashed in his admiration of the recently instated Plowden Report, [10] he assigned two of his under-agents J.F. Kinlin and Phillis Moore to investigate its effects in the hopes of giving some guiding principles to the recently struck Hall-Dennis Committee. Upon the submission of their reports, a flurry of internal memoes ensued, remarking enthusiastically on the positive reforms Britain had undertaken. Each report focused on an area of education that would later play a central issue in the Hall-Dennis Report. Kinlin's

[10] In the same vein as the Hadow Report, a new commission was appointed, under the chairmanship of Lady Bridget Plowden, to study primary education. For three years the commission conducted an extensive investigation. In 1967 it issued a detailed report in two volumes, which enthusiastically endorsed the informal approach to education.

report (1965), submitted directly to Davis himself[11], pointed out the Britons' use of concrete tasks (i.e. lab work), hands-on activity as providing the "basis for an integration of math with science (biology, mechanics, electricity, light, etc...) with geography (areas, maps, mapping, etc) with crafts (study of shapes) and with art (study of designs)" (p. 51). Textbooks are not used to glean concepts in a transmission format. "English education", remarked Kinlin, "develops them from observations and recordings from the real-life situations" (p.52). Also foreshadowing later Departmental mandates, Kinlin applauded Britain's use of large areas of studies or themes to group the disciplines.[12]

Moore's report[13] (based on interviews between June 14 and July 22, 1965), dwelt more on the collaborationist aspects of British education at the time. The neo-progressive argument is explicitly expressed throughout: "Real education comes from learning not teaching."; "children learn most effectively when motivation comes from within - curiosity, desire to know from recognition, from joy of constructing, from joy and excitement of discovery"; "education through experience"; [Many schools have] "adopted the term "Language Arts" to emphasize the "Seamless robe of learning" (pp. 2-7). Moore saw the benefits of this system as applying to both teachers and students. Teachers seemed more professional and independent because they were required to formulate and apply concrete philosophies to their teaching. The atmosphere in classrooms seemed very relaxed, and democracy between teacher and student was facilitated.[14]

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[11] Accompanying the report on October 8, 1965, Kinlin wrote to Davis: "Enclosed you will find a copy of the bulletin `Education in England - Report #4', which at Dr. Phimister's suggestion has been supplied to the principal officials of the Department `for their interest and information, and for discussion later on. As the title indicates, this particular report represents a summary of special features that I consider worthy of note. The other 3 projects were on projects suggested to me by Mr. Parnall, and were submitted to him in documented form" (National Archives: R.G. 2-62 Acc. 1162 8, Box 1 – "Approvals for Innovative Course Files").

[12] Primary school studies are grouped into studies of environment (clusters of science, geography, history and math), activities (physical education, music, art, drama) so that the traditional subjects do not appear separately but are organized into groups (p. 54).

[13] Memo of 13 August 1965, from Phyllis A. Moore to M.B. Parnall (National Archives: R.G. 2-62 Acc. 1162 8, Box 1 – "Approvals for Innovative Course Files").

[14] However, she did envision problems if these changes were introduced in Ontario. First, the level of skill and

These reports (and others) submitted to the Dennis-Hall committee in its early stages, had a towering effect in influencing the final report's leanings towards curriculum integration. However, it must be realized that, unlike Periods 1 and 2, the British reforms had impact on just the integrative philosophy adopted by the report (and subsequent Period 5 documents). No longer would the Department simply lift whole sections from other documents, cut and paste. Perhaps truer to the spirit of collaboration, guidelines would now be constructed through lengthy meetings with many stakeholders groups. By 1967, Davis announced that the Curriculum division was maintaining liaison with over 70 institutions whose activities and projects had direct bearing on the programs of Ontario Schools.[15] Closer links were also maintained with teachers' federations and they were regularly consulted in the construction and dissemination of the curriculum documents. Davis stated the Department's intentions quite clearly at a speech to the Legislature:

> The time has passed when courses of study can be written by 2 or 3 experts and then handed to principals and teachers to carry out in the classroom. A new course of study should not come as a surprise, nor should it come to teachers who are unprepared to implement it. Effort is being made to involve the teachers themselves in the formulation of the new program and to acquaint them with its pattern as it takes shape. (Davis Speech Files, 1962-1969, R.G. 2, p. 7, Ontario Archive)

In line with this more democratic curriculum, the committees mandated to create the new documents were specifically instructed to leave them as fairly wide frameworks, open to interpretation at the school and classroom level. These courses were then assessed in selected classrooms and discussed among teachers, students, interested parents and businessmen. It was expected that teachers would modify, clarify, and add detail to the curriculum on their own. The

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training demanded in teachers was much higher. Such integrated activities required teachers who could create a fulfilling environment, accurately assess the educational value of each activity, and also ensure the progress of individual students. Second, "integrated activities" and "environmental studies" require very careful planning to create balance and to have a sequence of concept development.

[15] This included such groups as the Canadian Association of Physicists, the CBC, and the Canadian Institute of International affairs (Ontario, Legislative Assembly, *Debates*, 5th session, 17 May 1967, p. 3536).

Department encouraged teachers to "explore the possibilities of inter-disciplinary planning in which subject boundaries are blurred" (5C-9). This would entail meeting and collaborating with other teachers within the school – perhaps in a team-planning or team-teaching setting. Most dramatically, teachers were also specifically advised to engage in collaboration with their students in designing the specifics of the curriculum.

In undertaking these changes, Davis reformed the reason for the Department's existence. While the Department was responsible for ensuring proper educational opportunities for all, it was not to act as a centralized authority dictating policy, while supervising and evaluating the other levels (i.e. teachers). As such, its hierarchical structure began to crumble. In 1967, the existing 1113 Inspectors were reassigned as Program Consultants attached to regional offices. Before, these officers had been responsible for both inspection and consultation on implementing new curricular programs. Now they were restricted to visit schools only on invitation of local authority and made no reports on the quality of teaching they observed during visits. By 1970, the consultants had been reduced to 150 in regional offices, and most were now being trained as subject generalists or were assuming special responsibilities in matters of school organization.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

While the Davis administration maintains Robarts' sentiment that the Ontario educational system should be seen as a continuum, the Grade 7-8 level finds a more specific home in the Intermediate division. Within this vague barrier, however, much leeway is given. The guidelines make a point of not slotting any particular information, etc in any earmarked school year. Rather, the teacher is given the authority to put it in any order desired – so long as the objectives were fulfilled over the four-year period. This is quite in line with the flexible, individualized intentions of the overall program, and lends itself readily to a vertical integration between grade 7 and 10.

Analysis of Dimension E: Integration Methods/Approaches

Primary Forms of Integration

The documents of this period weave a number of forms into a fairly complex web – At the heart of this network sits the ***Thematic Approach*** (as it has been so often seen in earlier periods). Under the pseudonyms "Topics", "Themes" and "Units", the approach is used extensively to "naturally" relate subjects and ideas within one course. Because of the Department's abhorrence of the cycloptic vision of the traditional disciplines (in that only one perspective is shown at a time), it is almost mandated that facets of other disciplines must be brought in. Depending on the topic, the teacher must consult other disciplinary experts to bring in all the "appropriate" perspective to aid the investigation (5L-4). The strength of thematic-centred courses, explains the Department, lies in the opportunity to integrate knowledge from many traditional disciplines, thereby giving the student a richer educational experience than s/he would gain otherwise (5I-29). "The thematic approach brings together factual information and underlying concepts in a unique relationship as the study of the theme threads its way across traditional boundaries of organizational patterns" (5I-30). At this point, the approach used during this period is very similar to Period 2's Enterprise Method.

However, the Department then recommends that teachers take this one step further. Many documents echo Technology's admonition that "it would be contrary to the spirit of this document if planning and presentation were to be limited to the resources of a single subject or person" (5J-3). Broad references, in almost all guidelines, extend the thematic approach beyond the classroom to bring in the ***Multidisciplinary Approach.*** As such, teachers are instructed to make liaisons with teachers of other "naturally related" subjects to create team-teaching, team-planning situations or even curriculum policy committees. Links are mentioned between Physical Education and Health, Family Studies, and Science (5P-14, 5P-6). Dance is another prime example – it can be co-planned between teachers of History, Geography, Family Studies,

Theatre Arts, English and Modern Languages (5P-10). Science, Environmental Science and Consumer Studies expand on this suggestion. They recommend that certain topics can be sliced off from specific subject areas and, through a coordinated study, scattered as a broad theme into many niches of the curriculum (5I-6, 5I-9, 5N-1a, 5N-4, 5G-5a, 5G-5b). This procedure is even given the special label "interdisciplinary studies" at this time.

Secondary/Localized Forms of Integration

In an effort to democratize the curriculum, even students were given the ability to have a certain amount of say on its creation. To accomplish this, more credence was given to the illusive ***Transdisciplinary Approach*** in this period than ever before (or since as a matter of fact). In relation to the above approaches, students were allowed great decision making power over the themes used, and were allowed voices in the team-planning sessions. Many guidelines even recommend that students should take control of segments of the course period and engage in self-directed independent study.

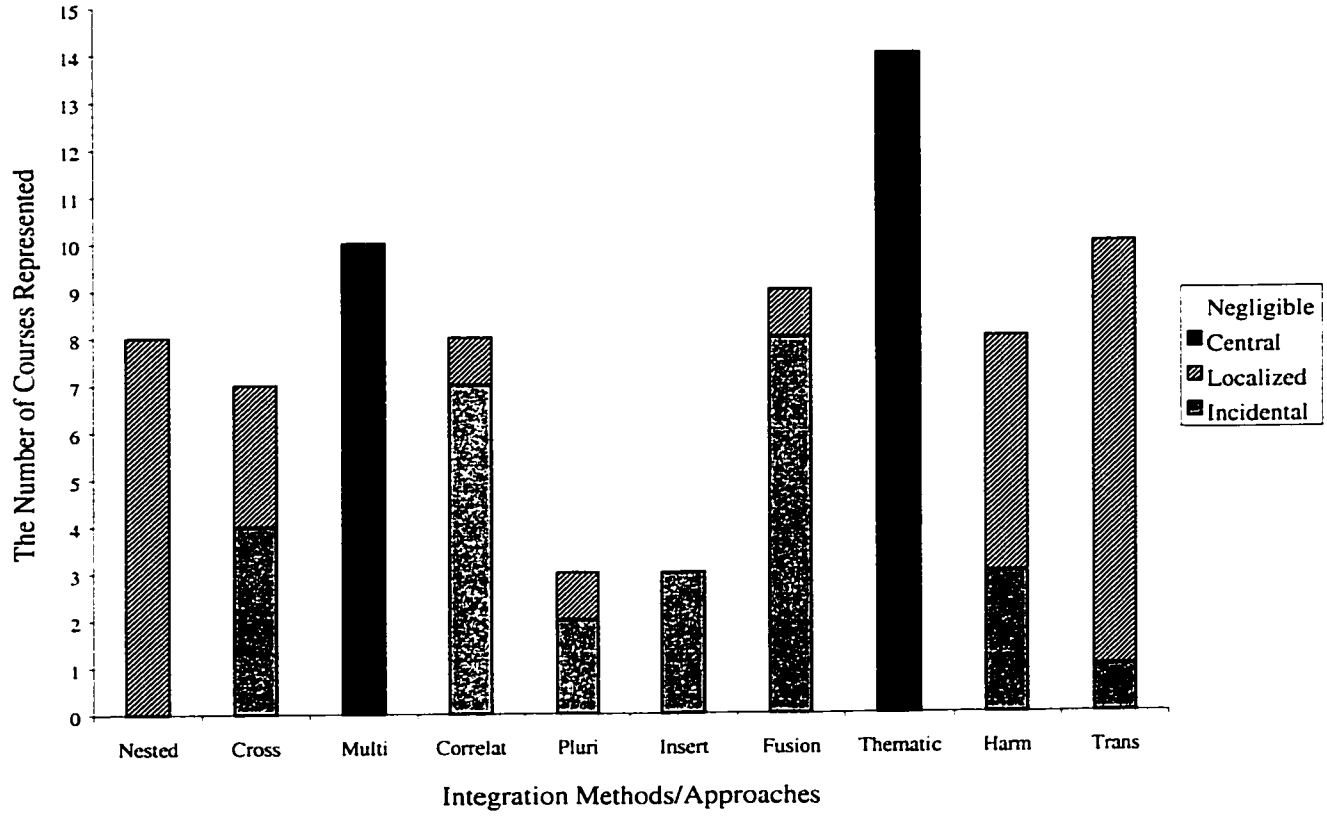
The ***Nested Approach*** makes a drop from the last period, in that the layout and information of each subject area is not spelled out precisely. However, this method is still endorsed – just in a more general way. The Department sees unity as starting from within the subjects themselves. The one switch is that it leaves the arrangements of this unity up to each teacher to decide. This is why the guidelines are left especially broad in scope.

A certain amount of ***Harmonization*** returns to the curriculum in this period. However, there appears to be more rhetoric than actual action at this stage. As can be seen in figure 5.1 on page 542, English, Science, Music, Guidance and Health all state that their corresponding skills should permeate the entire curriculum. But they are not mentioned much beyond their own guideline.

Incidental Forms of Integration

As seen above, the remaining approaches are mentioned frequently, but in very vague terms. English is a good example of the amorphous treatment given to some forms of integration at spots: "topic might also be introduced through art, music, history, economics, and any other appropriate area of interest" (5C-10). While it could mean a theme or implicitly require relations with other teachers, it could just as easily be the cross-disciplinary approach. This type of phrasing, vague in reference, is peppered throughout the documents.

Chart 5.2 - Dimension E (The Importance of Integration Methods/Approaches)



Analysis of Dimension F & G: Implementing Curriculum Integration

Two factors contributed most to the changes in the Department's implementation policy – the added leeway given to curriculum interpretation and the evolution of the Department itself from a regulatory to a service body.

As can be seen in profiles F and G (see pp. 554-555), it was the Department's sincere belief, at this time, that the curriculum would be applied only if people had some intrinsic connection to it. As such, the addition of more stakeholders to the design and implementation process (not increased centralization) was considered crucial. Accountability – at least from the preceding authoritarian stance – was considered a chimera. Who could say what is important and what is not? Certainly not an ivory tower. The actions taken by the Department at this time, therefore, can be seen as an attempt to remove any impediments that might hinder the democratization (and hence true integration) of the curriculum. No specialized documents are issued. Rather the guidelines are left fairly vague and adaptable, and any form of systematized testing was discouraged to enable as much freedom as possible to the local level. Teachers were encouraged to meet frequently in attempts to reconstitute the course of studies, while facets of the educational community long dormant (namely the community and the students) were brought into the fold of decision-making.

While the Department still maintained its powers of curriculum creation, these became far more watered-down, replaced by a more open policy. Departmental duties were no longer typified as prescription, dissemination, supervision and evaluation. Rather, Davis did his utmost to make it a supportive body. This is borne out by the incredible amount of funding earmarked for regional offices, created specifically to help local teachers through professional development. The genuine intentions of the Minister can be seen in his proud statements throughout his Annual Reports (1968-1971) as to the amount of in-servicing in which these offices were engaged. These included ongoing courses for teachers in Art (1968), Business and Commerce (1968), Guidance

(in which 1200 were enrolled in 1968 and 2000 in 1970), Mathematics (involving 60 school boards in 1969), French (1970), Home Economics (1970). Of most interest was the creation of a particular in-service course devoted to Integrated Studies in June of 1968. The program was said to "look at recent curriculum developments with a view to further examination of suitable areas for co-ordination and integration of the three subjects" (Annual Report, 1969, pp. 4-5). For the first time, summer courses with the title *Integrated Studies* were given to help elementary school teachers use the everyday experiences of children to broaden skills and concepts traditionally associated with individual subjects. The teachers had opportunities to work together and plan an integrated curriculum. Alongside these new courses, Davis announced the increased amount of educational resources that the Department was now willing to place in the hands of the teacher:

> Being centrally located, the Department is also specially qualified to be a resource centre for new information and a clearing house for worthwhile ideas emanating from within and outside the province" (pp. 3-4).

Accompanying this was the publication of *Dimensions in Education* that was sent out to teachers monthly to keep them abreast of changes to the curriculum and innovations to teaching in general. It cannot be denied, therefore, that a great change of heart had come into the Department and was manifested in the sweeping improvements it made to Department-teacher relations, and to the implementation process. However, this change of heart cannot be blamed on any miserly behaviour in past periods. Rather, this incredible generosity on the Department's part during this period may have had a lot to do with the greatly increased amount of funding it was receiving from the government.[16] The question remaining, however, was just how long the enthusiasm and the money would last.

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[16] While the Department showed a rise in expenditure from $400 million in 1964-5 to $1.1 billion in 1970-1, this is in line with the 250% rise in revenue received through increased taxation (see Ontario budget 1965-1970).

Overall Remarks on Period 5

The sheer rolling mass of changes during this period do much to blur the intentions at the core of the Department's actions. To the unsuspecting it may appear as nothing more than chaos – certainly to Dunlop it would have looked like education in Ontario had been cut from its mooring and gone adrift. However, if the various threads of logic are pulled apart, the basis of curriculum integration during this period can be traced back to certain fundamental shifts in philosophy and economics:

1. Individual Freedom Drives the Curriculum Process
Fed by the overwhelming influence of contemporary scholarship (from academic theorists, the British sources, and the Hall-Dennis recommendations), the Department decided that the most important aspect of the educational process was the development of self-actualized, self-reliant students (Dimension A & B). As it was also believed that only the individual student could motivate and teach this to himself, choose his/her own path, and know how far to go, the curriculum process must be turned upside down (or right-side up depending on the view). Rather than the top-down structure of period 4, student interest must once again be the driving force. As such, the ones who can be of the most aid to these students are the ones that are closest to them – the teachers. While guidelines are brought out, based on a wide view by those representative of educational thought in Ontario, the true curriculum can only be achieved through the collaboration of the teachers and students in particular (Dimension C).

2. Natural Links among Traditional Core Subject
The Department returns to its belief that natural relations exist between certain perennial subjects. However, the twist in this period is that only those at the operating core (the teachers) would be qualified to pick these out.

3. "Human" Forms of Integration

Therefore, because no uniform system can be imposed across Ontario, yet must be opened for natural links chosen by the teachers themselves, the Department is fairly strapped for mandating any distinct integration approach at this time. Certainly any authoritarian forms, such as those seen in the last period, are out of the question. It is broadly mentioned as "thematic". However, wide accommodation is given for local interpretation as to the uses and specifics of these themes. To encourage teacher interaction, the "multidisciplinary approach" is also suggested. This inter-disciplinary approach necessitates much cooperative planning by students and teachers. Again, specifics are left up to the teacher. Lastly, while the most extreme form of integration, the field trip, is mentioned fairly frequently, the one downside to this is that teachers may make the mistake of isolating "relevance" into one day a term.

4. More Political Reasons for Options

Certain courses seem to have mutated to become more acceptable to a wider audience. In doing that, they also include many more elements within the course structure. This is especially true of Environmental Science, which replaced Agriculture during this period.[17] The new courses of Latin, Consumer Studies and Informatics go quite far in ingratiating themselves to the core subjects and try to show their indispensibility to the curriculum as a whole. This is a strained relationship, however, and must be seen as pragmatic-political-machiaevellian integration.

5. Money Allows the Realization of this Scheme

It is only through the large injection of funding at this time that allowed Davis to bring reformed vision to life with little negative reaction. If this had been enacted with no money, the theoretical steps would have been to close down the Department completely, and just divide the remaining funds among all teachers with the faith that they would know what to do with it. However, it

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[17] The change to the name "Environmental Science" met with considerable interest, a much wider acceptance than the previous course and appeared to remove some of the stigma attached to agriculture. See "Aims of Agricultural" Science" (Ontario Archives: R.G. 2, I-21, p.5).

would also have caused a public uproar from the tax-payers. As it was, he was able to strike a compromise. While much more freedom was given to teachers, and they were able to get more direct help from program consultants rather than being inspected, the public was made to feel that the Department was still quite visible through its 10 regional offices. As well, this new accent on a more "qualitative" form of education was a lot more costly than the old standardized form – if the economy had been tighter, taxpayers may have been a little more critical of any revolutionary approaches or experimentation. As it was, a balance of freedom and authority was maintained during this period.

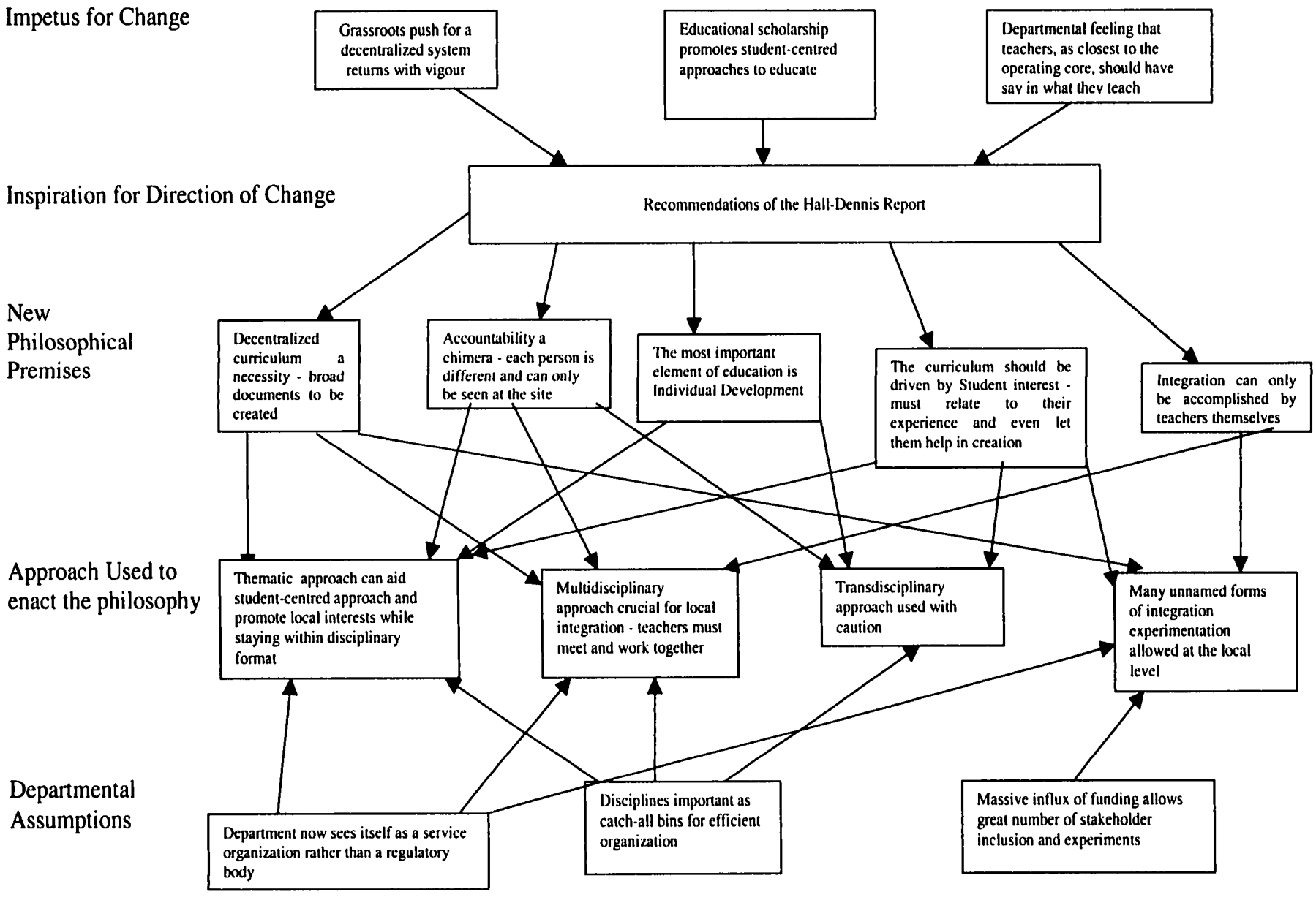

Diagram 5. Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 6

"The Wells Curriculum"

1975-1983

Context of the 1975-1983 Curriculum

By the Mid-1970s, the Department had reached the apex of its prosperity. It had achieved the designation of Ministry, and had expanded over the past 10 years to include a much more complex infrastructure and a presence in the educational community as a service agency. Reflecting this augmented role, in 1972 the Program branch fissured into three distinct sections dealing with the development, the implementation and the research of future curricula. Unlike the bureaucracy, however, the creation of new documents proceeded at a fairly leisurely pace. A new Intermediate program was said to be underway as early as 1972, and was mentioned in every Annual Report up to 1975. Nevertheless, nothing more seemed to come from this activity (at least in the public eye as no core documents were published between 1973 and 1977). This may have been due to the vastly expanded process that curriculum creation had become. Based on a 6-year cyclical process recommended by the Hall-Dennis Report, each guideline was now going through several phases of input, initial creation, validation, field-testing and revision. Committees of seconded teachers and specialists (see Dimension C) carried out each step. As mentioned in the previous period, the Ministry mandated that these documents remain as mere frameworks for courses. The Minister of Education, Thomas Wells, promoted this vision up to 1975. Speaking at a teacher's conference, he stated that the Ministry:

> ...leaves it to school boards and schools and teachers to specifically devise actual programs for use in the classrooms. In this case, the onus will be heavily on people like yourselves to take the lead in making sure that programs are as relevant as possible to the real needs of today's youth. In this day and age particularly, this is no small responsibility (Wells, *Proceedings of the Health Education Conference*, 25 April 1975, p. 2)

This was backed up by annual submissions of 1500 locally developed courses that fell outside the scope of the Ministry's curriculum guidelines (See Annual Reports, 1972-1973).

It was perhaps inevitable that this optimistic vision of an individualized school system would eventually come under increased scrutiny. With the loss of Davis' magnetic personality

and the inability of the system to regulate itself, the list of critics grew every day. By the mid-70s, the Ministry could no longer ignore the conservative elements calling for more accountability. The *Peterborough Examiner* (January, 1975) was representative of the backlash: it criticized the Ministry's program as a "Cafeteria Curriculum" that allowed students to "graduate with a superficial impression of a helter-skelter of unrelated subjects." Similar comments came in from several key educational associations, each calling for a return to "core courses" where "the basics" would be taught.[1]

The initial response on the part of Wells to these critics was that of apology. While he still maintained the primacy of child-centred education,[2] in a press release he bluntly agreed "...that the elementary school curriculum is facing a sort of credibility problem in the eyes of many people" (9 November 1974). At the heart of the problem was the decentralization of the curriculum. While he defended the Ministry's policy of broad and generalized outlines in the past as an aid to innovative coursework,[3] he had to admit that:

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[1] For example, the Ontario Secondary School Teachers' Federation bulletin maintained that "Ministry staff will have to increase their curriculum development activities in order to produce effective practical descriptions of required sequential skills, methods of development and supportive content materials, for the core subjects in particular" (*At What Cost?).* The Ontario Federation of Home and School Associations officially petitioned the Ministry to establish a "basic core of content" in certain subjects. The Ontario Secondary School Headmasters' Council stated that it "supports the concept of a core program of a core of required skills within the Ontario secondary schools." Finally, the Ontario Public School Trustees' Association recently petitioned the Ministry to, "develop core curriculum guidelines of a more detailed nature in all areas of studies that, on the one hand, provide specific direction to teachers on the work to be covered on a core body of knowledge and, on the other hand, leave room for the inclusion of optional topics at the local level" (see the address by Thomas L. Wells to Ontario Association for Curriculum Development "Major Change in Curriculum Development", 12 November 1976). Further commentary regarding the backlash against "cafeteria-style education" is detailed in Gidney (1999, pp. 88-91).

[2] In his Annual Report (1974-5) he stated: "the most important component in the educational system is the student, whose existence creates the need for the system. There is no such thing as "the average student": each one is an individual with his or her own special needs and expectations. For this reason, the Ministry has long had a policy of endeavouring to provide great diversity of programs in an attempt to satisfy as many of these individual needs as possible" (p. 6).

[3] In a press release, Wells supported the system designed under Davis: "To be sure, some considerable good has come out of this approach and this policy. There are hundreds of instances around this Province where the challenge has been picked up enthusiastically by local educators, and the result has been excellent courses of study in thousands of classrooms. Many school boards have spent thousands of dollars doing this at the Ministry's direction. Teachers and subject specialists have spent many fruitful hours devising teaching programs of high quality" (Wells,. 12 November 1976)

> Looking at the overall situation, Province-wide, in some respects things haven't worked out as well as expected. In some crucial ways, the curriculum in our schools has become less cohesive, less directive and possibly in some cases even less challenging and demanding than ought to have been the case (12 November 1976, p. 1).

To this, his penitent response was thus:

> We are now convinced that, in our enthusiasm for curriculum flexibility, we may have gone too far in decentralizing the responsibility for the preparation of courses of study at the elementary and secondary levels. In championing the concept of local autonomy in curriculum development, I believe that we have relinquished to too great a degree the element of central direction and central expectations and standards of student achievement. One is left to ask the obvious questions. Have we been truly providing teachers with the kind of practical assistance and direction which they need, and which indeed they have been asking for? Or have we left teachers too much on their own to struggle with guidelines that have been too vague, too broad and inadequate in their guidance?" (p. 2).

To remedy this situation, Wells made the assurance that the Ministry was "going to take a much firmer grip on what is actually being taught in the elementary and secondary schools of the province." This would include the creation of guidelines that would be considerably more prescriptive and descriptive than had been seen in the previous period (see Gidney, 1999, pp. 95-96). In doing so, Wells hoped that it would give school boards and teachers more practical direction and assistance than before. As well, he was emphatic that the Regional offices would also "play a much more active and aggressive role in monitoring curriculum trends across the Province, and to ensure that courses of study being used in the schools are of the highest order."

Wells further acknowledged that "of the many charges levelled at the schools today, few have been more prevalent or difficult to refute than the allegation that "the basics" are being neglected" (9 November 1974). However, on this point he proved cagier. In speeches throughout Ontario between 1974 and 1977, he reiterated again and again that the new Intermediate program in the works would ensure that all students got a solid grounding in the

essential basics of education.[4] In the same breath, however, he would also point out that the basics included a host of various "life skills" (see Dimension A), not just a return to the 3Rs. While he agreed that the pendulum of change in education swung a little too far during the 1960s, he also believed that "this is no time for some kind of hasty reactionary retreat -- and I would not want to be party to a sweeping backward swing of the pendulum." According to Wells, little would be accomplished through the wholesale eradication of Davis' curricular reforms, and any radical changes made in the cause of "back to basics" may eventually be detrimental to pupils. He hoped, therefore that the new curriculum would do much in "easing the pendulum back to a more balanced position that will benefit the vast majority of students" (12 November 1976).

Changes were made systematically, starting at the Primary-Junior level (the Formative Years as it was renamed). In 1975, a two document program was released - The Formative Years and Education in the Primary and Junior Divisions. It contained a series of precise statements of expectations for the elementary school program and stressed various approaches to best achieve an integration of these expectations. It hoped, thereby to create a system that ensured the teaching of certain basic skills while retaining a great deal of flexibility for teachers (see Fiorino, 1978). This model was then adapted to the Intermediate level in the following year. The new policy, outlined in the Minister's Annual report, explained that each curriculum would have a "core" of expectations accompanied by a number of options (Annual Report, 1976-7).

As changes were being made to the curriculum, the Wells administration appeared to go into a period of retrenchment. Concerned for the loss of funding caused by declining enrolments in the Ontario school system, the Ministry appointed Dr. Robert Jackson of OISE to study the

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[4] Two examples include: "...we have taken decisive steps to underline again and again the overwhelming importance of the basic skills -- the knowledge and skills upon which all later learning is based -- in the early years of schooling" (Wells, remarks to the Rotary Club of Burlington, 21 April 1976, p. 10). "I believe that in some respects the pendulum of change in education all across North America swung a little too far during the 1960s. Today, in mandating a basic core of required subjects, we are easing the pendulum back to a more balanced position that will be to the advantage of the vast majority of students" (Wells. *The New Core Curriculum in Secondary Schools.* 6 October 1976)

effects and implications of the problem. The resulting Report of the Commission on Declining Enrolments (1978) indicated that the trend would continue unabated into the foreseeable future. To overcome the losses incurred by this phenomenon, it was recommended that the Ministry should streamline its operations and download certain services to other agencies across the province. Wells anticipated this counsel, and reorganized the Ministry again in 1976, fusing the 3 branches of the Curriculum Division into one unit. While he made the argument that this was the first step in a program of major curriculum improvement (in that the process would be seen as a unified whole), it could not be denied that it was a "downsizing" action. More and more decisions were allocated away from the permanent staff and funneled into the broader-based host of Ministerial Advisory and Task Force committees in the latter half of the 1970s. Even more tell-tale was the shutting down by the Ministry of 3 of its 9 regional offices at the end of 1977.[5] Again, the Annual Report protested that it would "in no way affect the level of service that the Ministry provides to the boards through its regional services programs" (1977-8, p. 16). Lastly, due to the declined enrollment of student teachers at the end of 1978, the Ministry closed the OTE College and sent the remaining students to faculties of education.[6] In the last two instances, responsibilities were farmed out to external (or at least arm-length) agencies – the school boards and the universities. This would prove to be a harbinger of their growing power.

In late 1978, a permanent (or at least a temporarily permanent) solution was found to the Ministry's cash-strapped problems by merging it with the rather more affluent Ministry of Colleges and Universities. Bette Stephenson (Minister of the latter) replaced Wells and with less concern for finances than her predecessor, entered the scene with an agenda of her own – Bilingualism. Finding an almost limitless amount of funding from the Federal government

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[5] The Kingston office was folded into the Ottawa centre, Waterloo into London, and St Catharines into Toronto.

[6] In February 1978, the Ministry revealed that only 818 teacher trainees were enrolled at the College during the current year and that projections for September only showed a total of 450.

earmarked for this area, the new Minister embarked on a period of unrivalled spending to promote French and FSL education. Like Robarts' approach to introducing science so many years before, the Ministry allocated $44 million for incentive grants to school boards to improve and expand French as a second language. The grant formula was fairly straightforward: as the students' hours of French instruction increased, so did the per-pupil grant.[7] In addition to these grants, the Ministry allocated $23 million over the 3 years of the program for a wide variety of support programs, including teacher education, curriculum and learning materials development and student exchanges. Additional money was also set aside for the publication of new French-language textbooks, and the translation of all Ministry documents into French. The jewel in the crown for Stephenson (and perhaps the zenith of her career as Minister) was the inauguration of the new Core French course in 1980, named the best FSL guideline in all of North America.[8]

Features of the Period:

Still created incrementally (one subject document at a time), each guideline was actualized through a multi-phase process. After a preliminary study was completed, a writing team was seconded to create an initial draft. This then went to a validation committee, and then returned for revisions. For each core subject, a separate committee created a number of support documents. In all, the number of stakeholders involved in the curriculum development process had risen by a substantial number, and become more heterogeneous.

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[7] Although it must be acknowledged that this phenomenon had been started before her arrival (announced by Wells on 18 April 1977), it cannot be denied that she latched on to it as a *raison d'etre*.

[8] See the two editions of *Education Ontario*, (Fall, 1981, p. 1) and (March, 1984, p. 1).

		Classical Studies	English	History	Geography	Science	Physical Ed	Guidance	French	Dramatic Arts	Computer Studies
Writing Committee	Ministry Official	-	1	5	3	4	1	4	3	1	7
	University affiliate	-	4	0	0	0	1	0	4	1	3
	Board official	-	1	0	0	4	2	3	4	1	2
	School Administrator	-	2	0	0	9	0	3	0	0	0
	Teacher	-	2	0	3	1	1	3	14	3	19
	Subject-related Specialist	-	0	0	0	0	2	1	0	0	0
	Total		**10**	**5**	**6**	**18**	**7**	**14**	**25**	**6**	**31**
Validation Committee	Ministry Official	-	0	2	1	0	10	2	-	22	-
	University affiliate	-	5	2	1	0	3	0	-	21	-
	Board official	-	6	2	2	0	6	1	-	2	-
	School Admin/Dept Head	-	7	2	0	100	1	2	-	0	-
	Teacher	-	2	3	6	100	0	4	-	5	-
	Subject-related Specialist	-	3	2	1	0	8	1	-	0	-
	Total		**23**	**13**	**11**	**200**	**28**	**10**	**-**	**10**	**-**
Support Committee	Ministry Official	-	0	-	-	1	0	-	-	3	-
	University affiliate	-	0	-	-	7	20	-	-	7	-
	Board official	-	0	-	-	0	70	-	-	8	-
	School Administrator	-	6	-	-	0	196	-	-	0	-
	Teacher	-	5	-	-	1	310	-	-	20	-
	Subject-related Specialist	-	4	-	-	0	97	-	-	1	-
	Total	**-**	**15**	**-**	**-**	**9**	**693**	**-**	**-**	**39**	**-**

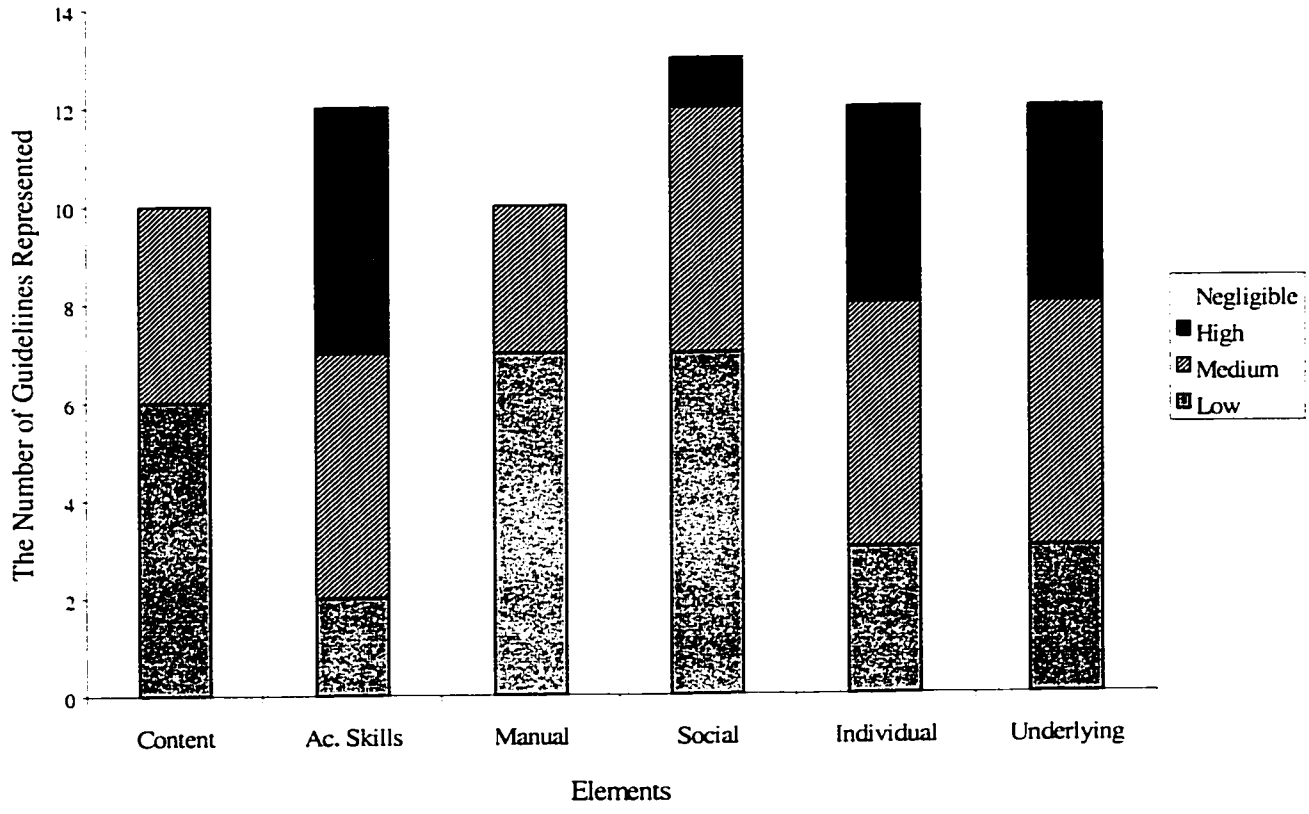
Analysis of Dimension A: Elements Used During Integration

In a speech at the Ontario Association for Curriculum Development (November 9, 1974), Wells stated that the new curriculum would endeavour to teach "the basics":

> "I believe that the basics -- however one tries to describe them -- can be subdivided into 4 essential components (even though they actually constitute an individual whole):
>
> --the fundamental premise is that education must develop and preserve the confidence and self-worth of the individual child. From that foundation, one can move on to say that each child, to the limit of his or her potential, should:
> --become proficient in the skills fundamental to future learning
> --acquire knowledge & attitudes leading to active participation in Canadian and world society, and
> --acquire the moral and aesthetic sensitivity necessary for a complete and responsible life."

In other words, Wells was quite concerned about keeping all the balls in the air at one time. As is shown in table chart 6.1, he did accomplish the most crucial balancing act – that of maintaining the vision of individual development (component 1) while trying to integrate in the 3Rs (Component 2). Less successful (though still quite a good job) was the re-introduction of social skills (3) and lastly underlying principles (4).

Chart 6.1 - Dimension A (The Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

While the objectives remain much the same as the previous period at their roots, the Wells administration felt that certain revisions were necessary to achieve a more balanced and harmonious curriculum.

Internal Consistency First, then Subject Unity

As in the previous period, the Ministry believed that the curriculum should consist of balanced bodies of knowledge (subjects) that can be readily interrelated to enhance meaning and coherence. In fact, it believed that the previous period had done much to undermine this, the very philosophy that they had promoted. Erring on the side of flexibility and individual freedom, the Davis Administration had turned courses into merely "large catch-all bins". Without this proper base in each subject, it had promoted higher levels of integration (such as multidisciplinary, inter-subject themes, etc.), thereby placing the cart before the horse. In an attempt to reestablish a sense of cohesiveness and solidity in the curriculum, therefore, the present teams of writers forcefully reemphasized fairly subject specific documents with internal consistency. Anything beyond the scope of the immediate subject should be undertaken only when the program is in place. This is seen especially throughout the English document. The writers take pains to tell teachers to create an "Integrated English Program" - that is, one that blends the four language components of reading, writing, speaking and listening into a unified, balanced whole. Similarly, the Science document insists that if a logically sequenced and objective-related program can be created, a "unity of science" will be achieved (6E-18, 6E-24, 6E-29, 6E-30). General comments are made in many documents concerning the ways of bringing these bodies together and unifying the curriculum once the core of the course is in place (see Dimension E), but few concrete instances are given. Not for the first time, this is considered a daunting event and something that should not be tinkered with lightly.

Generic "Adolescent Needs" Dominate Student-Centred Integration Again

As in the past, the Ministry links students' success with the realization of their interests. However, unlike the documents of the previous period, which displayed a desire to keep student interest at all costs while attending to their idiosyncratic needs, this curriculum takes a more universal and prescriptive approach. Drawing upon the work of educational psychologists, the Ministry reasoned that students did not lose interest in the subject at hand because it was not entertaining, but because the work had not been tailored to their level of adolescence.[9] With variations, this change in mentality is reflected in almost every guideline - all demand that the organization and objectives of each course must be within the adolescent's grasp, and "must take into account the emotional, social and intellectual needs, abilities and development of the students (6E-15). Computer Studies goes as far as stating that if the level of study does not match the students' capacity, damage to self-confidence could ensue 6J-12). Once again, the student lost direct control of the curriculum replaced by a professional perception of ubiquitous adolescent needs.

While somewhat reduced, active student participation still remain as mainstays of child-centred education in some classes, and are used as indicators that the course is going in the right direction. Gone are the freewheeling, student-led activities of the previous period, however - now there is a more formalistic feel to it. In English, for example, the guideline demands that teachers allow students to spend half of class-time actively reading and writing (6B-3, 6B-15). While the guideline admits that students learn best through interactive experiences (6B-37), little mention is made whether this will interest the students or not - beyond the rather terse statement "to a large extent, learning success in these intervening years will be measured by the student's preparedness to continue with their education" (6B-24). Furthermore, it does say that teachers should encourage student collaboration in the learning process - but only at the secondary level after they

[9] These are included as resources at the back of the Guidance guideline in particular (see pp. 40-41).

have been properly trained (6B-2). The concession made by French to student-centred activity is that teachers should accept an amount of "productive noise" (6H-28). The only other classes that promote activity as a means of stimulating student interest are the traditionally hands-on subjects. Science, as it has in the past, places great emphasis on student-performed experiments (6E-5, 6E-19), while Computer Studies says that students should explore their interests through the computer (6J-9). Drama, as to be expected, says that experiential learning through acting, spontaneous activities and verbally responding to readings will stimulate greater learning and interest (6I-5, 6I-7, 6I-11, 6I-13, 6I-14, 6I-18).

It is quite obvious that the curriculum designers of this period went to great pains to balance subject- and student-centred objectives. In doing this, however, the greatest casualty was student ownership of their education. While a few vestiges remain in History (certain optional units can be co-planned by students and teachers - 6C-28, 6C-29) and Physical Education (which makes one brief reference to "contract teaching" for some of the more troubles students - 6F-11), it seems that the Ministry believed this approach to be too great a risk to the balance.

Continuity Largely Ignored

The integration of material for the purpose of social continuity continues to play a small role, and appears mostly in the core subjects. This usually takes the form of exposing students to past heritages (6A-1, 6A-3 6A-5, 6A-12, 6A-14, 6E-4), civic responsibilities (6C-13), the promotion of social unity (6G-8, 6G-10, 6G-15, 6G-16, 6F-20), fitting into Canadian society (6F-7, 6I-6), career planning (6G-19) or constructive leisure-time pursuits (6G-20). Otherwise, little mention is made of this purpose.

Weak Call for Change

While not as highly charged as other periods under study, this curriculum has a few social problems that it wishes to solve through the reeducation of the province's youth (see 6B-2, 6B-3, 6B-4, 6E-9, 6E-11, 6F-2, 6F-4, 6F-5). On the whole, the integration of these beliefs tend to be

quite subject specific: French promotes an acceptance of the Francophone presence in Canada and a protestation of past stereotyping; Computers Studies tries to make everyone computer literate; Guidance wants children to have a knowledge of the changing of sex roles in modern society; Science, echoing a belief held since the early 1960s, states that students should be exposed to leading edge changes in the scientific world; Physical Education tries to promote an emphasis on exercise, love of activity (6F-7, 6F-8, 6F-26 to 6F-28).[10] The two attempts at social change that have some cross-over are the Ministry's Language Across the Curriculum policy (6B-4), and the promotion of environmentalism in Geography (6B-30), Science (6E-12, 6E-14. 6E-22), and Physical Education (6F-21).

Analysis of Dimension C: Loci of Integration

In the previous period, curriculum creation had not been considered a difficult or time-consuming process. Outlines were purposely left in a vague state so that the teachers could adapt them to their surroundings. As such, the Department believed these front-line workers to be "innately wise." By the mid-1970s, however, this had led to a multitude of comments from parent and beginning teachers calling for more precisely delineated documents (seen in context section). Connelly and Greenfield's 1976 report on the conditions of curriculum implementation sums up the root of the criticisms:

> Without better support for school-based curriculum development, it seems likely that the curriculum ... will be only as good as successful and dedicated teachers and principals can make it. What they are actually doing in these circumstances and how successful it is remains largely a mystery. (p. 38)

What had become evident to the Ministry is that while much local autonomy should be maintained, more guidance had to be given to teachers through the documents, and a system had to be created whereby there could be some accountability to the public. To enable that, Wells

[10] This is quite in league with the *Participaction* program that was being promoted in Ontario at the time.

announced that "there will be a more aggressive Ministry presence in the curriculum partnership" (12 November 1976).

Curriculum creation proved costly and time-consuming. Although Wells knew that certain prescribed skills and content (namely a return to the 3Rs) were being called for on the part of the public, he could no longer create a small writing committee of departmental officials to write these documents. Any detailed guidelines would be highly criticized and possibly rejected by much of the educational community due to their "idealistic" and elitist" development. It would seem that after opening the door to inclusion in the previous period, no wholesale return would be allowed. Indeed, the only way to accomplish this was to second a greater number of representatives, with more checks and balances. Divided into a series of phases, the Ministry initiated a cyclical process, initially recommended by the Hall-Dennis Report. The first phase consisted of research and study by the Curriculum Development Branch staff and program consultants:

> In preparing such a guideline, the branch would weigh the views of parents, trustees and administrators in the light of new trends in education in Canada and abroad. ... In all cases, viewpoints from Ontario's educational community and results from all current research would be considered and merged into a coherent policy (Annual Report, 1973, p. 8).

In the second phase, committees, made up of seconded assistant superintendents, program consultants, teachers and related stakeholders, would meet to develop guidelines that could be adapted to local needs (Annual Report, 1977-8). As soon as the writing team had completed an initial draft guideline, it would then be put through a validation process. In going through this process, Wells hoped that it would bring much more credibility to these new "affirmative" documents. He mentions in his address to the OACD: "This is not going to be a theoretical exercise, removed from the front lines of teaching and learning; we plan to make the best use of educators both within and outside of the Ministry of Education" (1976, p. 4). The crucial element of these guidelines was the teaching of certain "core" expectations. The approaches used

to meet these objectives were still left up to individual teachers (as long as the integrity of the course was maintained). A number of suggestive resource documents, entitled "Curriculum Ideas for Teachers" were also specially created to aid teachers in organizing coursework.

As will be seen in Dimensions F & G, boards and school committees were also given credence for involvement in the adaptation of the guidelines. Wells (21 April 1976) goes as far as stating "We put the onus on locally elected school trustees and their principals to develop recommended core programs for their pupils because that is where the responsibility belongs." (p. 13). Clearly, in this period the curriculum documents cease to be a one-way transmission from Ministry to Teacher – their creation becomes only a starting point that may consequently involve many stakeholders down the line.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

While the Ministry has put a few more time limits on the fulfillment of certain expectations, it still leaves a lot of leeway during the Intermediate level. It continues to see the Primary, Junior, Intermediate, Senior continuum as a suitable structure. There is no attempt to re-link Grades 7-8 back with the elementary system - however strong warning is also given against the preparing of students for higher Senior levels too early. As mentioned in Dimension B, the Ministry believed that it was important to meet certain adolescent needs at specific times in their schooling. They should neither be pushed forward, nor held back.

Analysis of Dimension E: Integration Methods/Approaches

In parallel to almost every dimension, the Ministry again tries to balance the approaches that should be attempted when integrating the curriculum. While every method of integration is not highly promoted, each one is mentioned at least once. This shows an awareness on the part of the curriculum designers of the variety out there (as noted in the Review of Literature section, this was also the time when theorists were beginning to explore the subdivision of this dimension).

Primary Integration Approach

As mentioned in Dimension B, the documents of this period display a great concern for the internal consistency of each subject. Each course is organized into a number of units or components. Taught in a logical sequence or blended together, the expectations must be constructed in such a way that there is coherence and unity to it. In the end, this ***Nested Approach*** is used so that the students will think of each course as a "body of knowledge." With such an emphasis on internal integration, there appears to be a concomitant drop in higher-level integration ventures. No barriers are placed in the way of teachers who wish to try this, and several points of contact between subject areas are surfaced, but the Ministry makes no pretence that this should only be attempted after a coherent, subject-centred program has been developed first.

Remaining from the previous period is the belief in "Natural Linkages." However, curriculum designers feel more at ease now with making specific connections. Whenever they see any overlapping between subject areas they make the ***Correlation*** on the spot to enlighten teachers. While this method still remains an *ad hoc* approach (in that the connections are merely sprinkled throughout each guideline), it is applied systematically in almost every document. It appears that the Ministry considered this a good transition approach in that it gives some direction, but does not smother the teacher with a prescribed method.

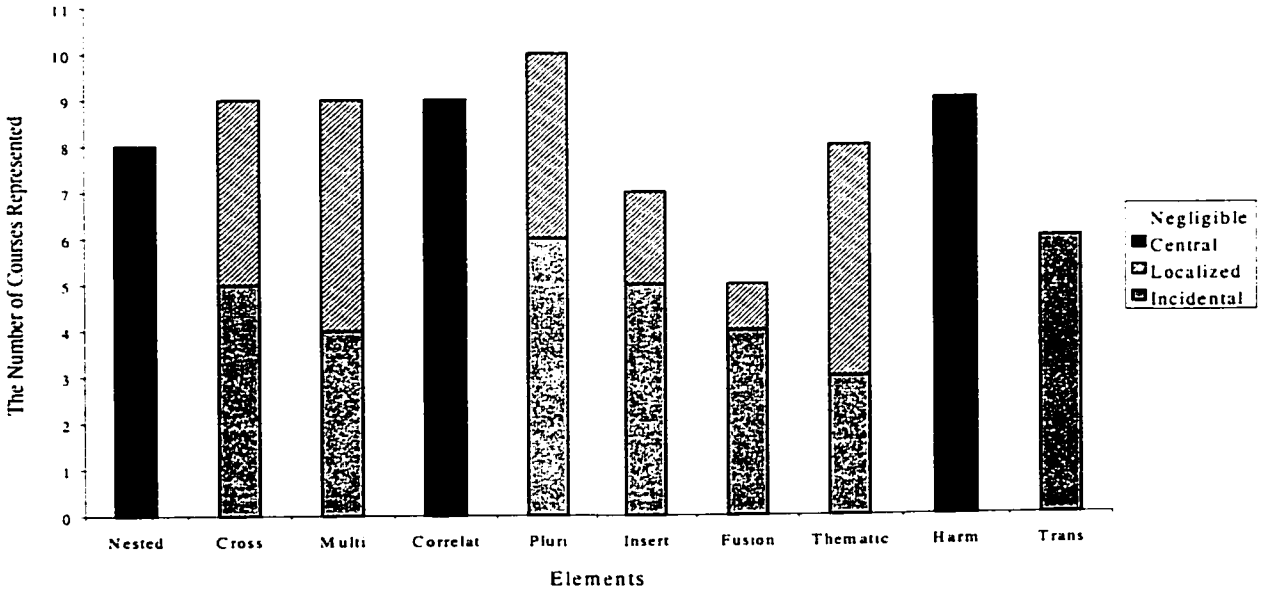
The Language Across the Curriculum policy represents the first time that a skill is

actually ***harmonized*** across subject areas. This represents a growing amount of sophistication in cross-subject integration techniques not seen since the programme was united under one document. In fact, because its creation was the product of at least 12 separate committees over a 5-year period rather than the older 1-committee, 2-month period, it represents a much more complex process. This may be seen as a trendsetter for the OSIS documents in the next period.

Localized/Incidental Integration Approaches

While "the unit" has now become a mainstay of each curriculum, it should not be automatically considered a mainstream ***thematic approach***. It should be seen as more of an outlier to this method, and more closely related to the nested approach. Like in the Robarts period, it is promoted more as a way of keeping an orderly sequence than for student group work. All other methods are referred to in greater or lesser extents. However, as seen in figure 6.5 (Appendix C, p. 567) most of these remain as undeveloped suggestions.

Chart 6.2 - Dimension E (The Importance of Integration Methods/Approaches)



Analysis of Dimensions F & G: Implementing Curriculum Integration

Alongside the degeneration of curriculum development in the 1960s, reports came in that the entire educational system had been decentralized to the point of unaccountability. Again, Connelly and Greenfield (1976) bring the situation to light:

> The organizational structure of the system appears to militate against a clear, comprehensive, and coordinated process for curriculum. Specialized or functional responsibilities are dispersed among many people in the administrative structure. More strategic massing of personnel and resources might produce the overall policy and approach to curriculum problems, which are now lacking in the system. Co-ordination and communication among different schools and teachers on curriculum matters does not appear to be strong. (p. 38)

They concluded that, to a large extent, teachers were left alone to implement a curriculum, neither helped nor hindered by any level of the educational hierarchy. To remedy this problem, they suggested that a massive insertion of funding must be given to support staff and a coordinated set-up must be implemented to deal systematically with all changes to the program. They proposed that a balance of accountability and decentralization could be reached:

> A comprehensive policy for curriculum process would not interfere with a desire to base curriculum development in schools, but it would ensure that such development occurred within a framework of aims, that it was informed by a meaningful assessment of needs, that it received adequate support for implementation, and that it was subject to critical evaluation. ... what these same dedicated and successful teachers might do with more effective support for needs assessment, implementation, and evaluation must remain unknown until the system recognizes that such support is both practical and necessary. (p. 39)

Many reports like this, submitted during this period, hit the Ministry with the realization that a greatly increased infrastructure was going to be needed to strike this balance. However, these reports also invalidated the older method of implementation taken by the Department of the past - namely, a centralized inspectorate system. Besides, to be a truly representative system the cost would be prohibitive. What was needed was a great deal of coordination between an expanded number of stakeholders who were already part of the educational system, but had been perhaps underutilized. Until the Mid-70s the *Curriculum Services Branch* was assigned responsibility for

assisting teachers and administrators in the development of educational programs, implementing the Ministry's professional development courses for teachers, and obtaining reaction to Ministry programs and policies. As seen in figures 6.6 and 6.7 (Appendix C, pp. 573-574), the Ministry realized that it was not enough and began to download responsibilities (and accompanying informal control over the curriculum) to the school boards. They were given increased funding to tailor guidelines for the local level with more detail, were encouraged to handle professional development, and to perform a certain amount of limited program evaluation.[11] Principals were now being expected to act as chief liaison with board member in coordinating these activities. Even parents and member of the community were being solicited for consultation and volunteer activities during this period. There appeared to be great determination on the part of the Ministry "to achieve a closer liaison and rapport between those involved in the development of curriculum materials and local educators on the firing line" (12 November 1976).

Again, therefore, the Ministry of this period wished to reach a balance. Much leeway was still given to teachers' freedom for the development and implementation of the curriculum. They were continually warned against becoming attached to any particular subject, and told the paramount importance of teacher interaction with peers and with students in the use of integrative activities. What seemed to be happening, however, was that while wide latitude was still given in adapting the guidelines, the door was closing on "open creation". Because the documents were more specific and prescriptive, wider interpretations also became less acceptable when dealing with core expectations. Furthermore, to teachers who reveled in the unbounded freedom of the 1960s, the load of new material may have seemed a little more heavy, and for the first time since Davis' reforms in the mid-60s, time limits were being placed on the implementation period. Lastly, Wells made mention on a few occasions that he wished to tighten up the evaluation

[11] This had been one of the chief recommendations of Connelly & Greenfield (p. 5)

system and make it more accountable. Choosing his audiences carefully (he spoke mainly to the taxpayer groups on this issue), he discussed the importance of creating a balanced system whereby students could compare their grades to national or provincial norms, while not being brought down by any competitive referencing (21 April 1976). By 1977, the Ministry had appointed a 13-person work group to study and recommend better methods of pupil evaluation and better ways of reporting pupil progress to parents. However, Wells reiterated repeatedly that this would not entail any radical shifts:

> We will not return to a rigid lock-step curriculum of the kind that existed in the 1950s and earlier - because in those days the vast majority of young people dropped out of school prematurely mainly because they were unable to cope with a curriculum that was geared mainly for the academic cream-of-the-crop who were headed for university. We will not go back to that (6 October 1976).

Overall Remarks on Period 6

The Ministry's definition of curriculum integration during this period can be traced to its desire to achieve a delicate balance between diametrically opposite forces that were exerting themselves on the educational system.

1. The Davis Period's Philosophy of Education Found to be Sound

At the core of the Wells administration was a solid belief that the philosophy of Education created under the previous Minister had great merit (it must be remembered that Davis, as premier, still exerted an enormous influence on Ministry decisions). At the heart of this was the premise that instructional methods had to be left to each teacher's discretion, based on the students' individual needs and interests. As such, the Ministry felt that it did not have the veracity to make general statements of approach with the expectation that it would be carried out ideally. Rather, it was predicted that teachers knew best what to do in their locality. While the Ministry extended its available educational/curriculum services, it also felt that as professionals, teachers would come for help of their own free will when in trouble.

2. Petitions for more Accountability Heard

As to be expected in a system that is run on faith, many criticisms were made by many segments of society. Parents complained that they did not know how well their children were doing because there were no standards. Educational scholars pointed out that there was no accountability in the system, so the Ministry would not know where to target aid. Finally, teachers themselves (especially new ones), feeling that too much freedom was not such a good thing, pleaded for more guidance. Reaction from these elements of the voting population appears to have changed the Minister's mind considerably. The loss of trust in the wisdom of local educators can be clearly heard in a 1976 address by Wells - "we cannot leave it to chance that young people get the fundamentals. We have to *ensure* it" (6 October, 1976). Teacher's professionalism of the previous period has now turned into chance!

3. Fear of Radical Change

Wells knew well the consequences of a conservative backlash. As a protégé of Davis, himself, he did not want to be the leader of such a counter-revolutionary movement. Rather, he wanted to see evolutionary changes to perfect the system in place. He stated (21 April 1976) that "we won't be making any radical changes. We've all had enough of that. We are in a period of refinement and we HAVE been for the last 2 or 3 years. We are building on what we have and we are not afraid to admit mistakes and make alternatives where necessary." (p. 14)

4. The Outcome = "The Golden Mean"

The result of all the above concerns led to modifications (not changes) to the philosophy of the curriculum, the control of its implementation, and recommendations of its teaching methods. As seen in Dimensions A and B, the Ministry struggles throughout this period to reconcile past conceptions with present considerations, giving credence to both. Similarly, while trying to give as much freedom and autonomy to teachers as possible, the Ministry also endeavoured to create a system whereby some feedback can be attained. Also, due to a steady decrease in funding, the

Ministry realized that it was to its advantage to involve many more stakeholders. It would also do a lot to aid teachers who are now asking for it.

5. Tentative Ideals for Curriculum Integration

In earlier periods, the curriculum designers had either been completely confident in the generalizable success of the particular integration method (like Period 2 and the Enterprise), or had thrown out rather flip recommendations knowing that the teacher would have to take their own path (like in period 5). At this stage, however, while the designers seemed to feel that it was incumbent upon them to make concrete recommendations, they also felt that it was not quite their place to make dictates. To balance these two opposing beliefs, only tentative steps were taken in defining the term and explaining its implementation. Because it was most called for, each designer confidently promoted some form of internal coherency. Beyond that, however, most of the highly recommended forms of integration tended to be quite unintrusive (correlation being the best example).

6. Language Across the Curriculum

The one seeming success in integration is the Language-Across-the-Curriculum policy. Spurred on by a host of research in academic and popular educational journals at the time, this seems to have been relatively safe ground politically with teachers and university researchers. It was also what the public had been crying for. However, it was only because "natural links" could be shown in all the courses (pointed out in the specific support document and in the guidelines themselves) that this skill could be promoted. As seen during this period, Math, Science or French skills could not make this same transition. Indeed, the creators believed that the attainment of a separate course, dedicated strictly to the study of French, was a powerful symbol of it newfound status within the curriculum.

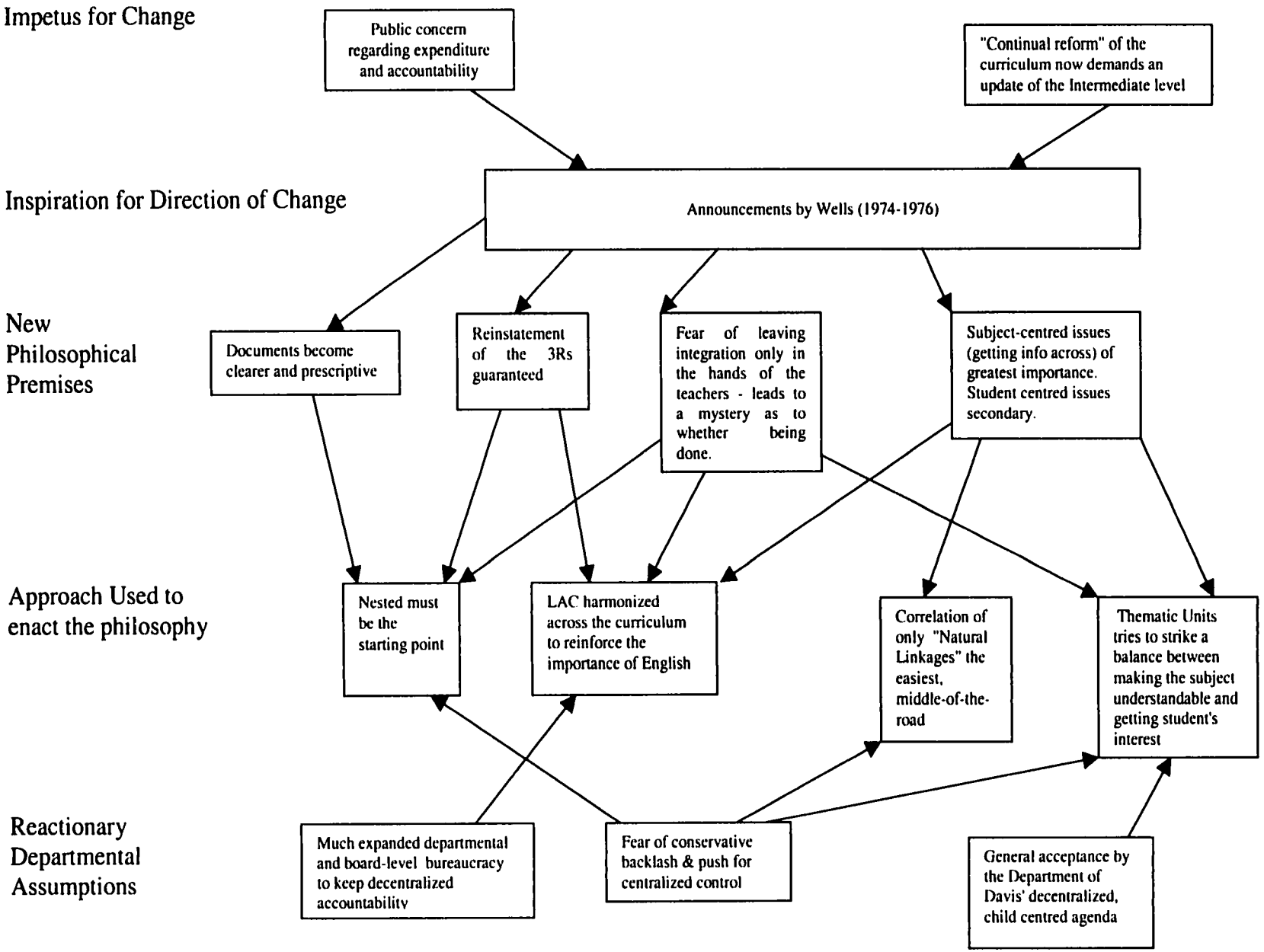


Diagram 6. Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 7

"The OSIS Curriculum"

1984-1991

Context of the 1984-1991 Curriculum

After spending the 1970s examining the elementary system, resulting in the Formative Years and "rigorous" Intermediate documents, the Ministry now turned its gaze on secondary education (which had remained largely untouched since 1969). In 1980, Bette Stephenson, fearful of the closed planning process and the federation intervention that had marked curriculum creation in the past, appointed a series of external panels under the group name "Secondary Education Review Project" (SERP). It was to undergo a broad consultation from the Ontario population and return with recommendations to the Ministry concerning the best policy directions for the new decade (for details see Gidney, 1999, pp. 97-99). Submitted in October 1981, reworked by Ministry officials, and published in November 1982, the resulting report entitled Renewal of Secondary Education in Ontario (ROSE) recommended that a more unified system be installed. This would include the distillation of the approximately 100 scattered Intermediate and Senior guidelines into 20 linked documents (Annual Report 1983-4, p. 8). As such, for the first time Grades 7 to 12 would be grouped as a continuum (Gidney, 1999, pp. 99-100).

Out of this report, a draft of the new policy requirements entitled *Ontario Schools: Intermediate and Senior Divisions* (OSIS) was circulated to the teacher federation affiliates, schools, boards and special interest groups between December 1982 and February 1983. The final version of Circular OSIS was distributed to the schools and school boards in September 1983 with the instructions that implementation was to take place incrementally, one grade level per year starting September 1984 until 1988/89 (Leithwood et al, 1987, p. 64).[1] Along with its accompanying circular *Schools General*, OS:IS became the basis for curriculum planning and for a unified educational philosophy.

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[1] At the Secondary level, this replaced the old Circular HS1.

While a revitalization of the curriculum was said to be on its way, a growing feeling of pessimism and unease seemed to grip the voting population in relation to the economy, the changes in the labour market, and the efficacy of the government in dealing with this problem. After Davis retired as premier in February 1985, this disconcertment rose to a fevered pitch resulting in the election of the Liberal party to office in June of that year. In terms of educational policy, however, this had little effect. OSIS had been put solidly in place the previous year, and all the curriculum committees had been formed to bring the subject documents in line with its policy. To the Liberals at the time, it would have been political suicide to cancel an already costly undertaking, only to begin a similar process. The path set by the Conservatives, therefore, would be the path they must tread.

Instead, the new ministerial incumbent, Sean Conway endeavoured to generally refocus the educational system along a more "planned change" approach, in line with Liberals' belief and contemporary educational scholarship.[2] In January 1987, he announced the Ministry would again be reorganized "to promote increased emphasis on corporate policy and planning as well as to recognize government priorities such as human resource management, the education and care of young children, adult and continuing education, and program implementation and review" (Annual Report, 1986-7). To accomplish these new functions, the Ministry was further subdivided into an expanded number of divisions and branches, each given specific tasks. The *Corporate Planning and Policy Division* was created with the responsibilities of systematizing operational planning and reporting, priority setting, strategic planning, corporate financial planning, policy development and analysis, research, educational liaison, legislative planning and legal counsel. It was hoped that this division would do much to aid an integrated management

[2] In fact, a guide put out by the Ministry describing the ideal evaluation and implementation process, reserved great praise for the work of Kenneth Leithwood. See Curriculum Management (1988).

approach, and help senior staff more closely relate long-term educational objectives with policy development and budgetary priorities.

The formerly unified Education Programs Division[3] was once again separated into a Learning Programs Division (further split into two "Centres" responsible for the creation of curriculum documents for Elementary [JK-8] and Secondary/Adult Education) and a Learning Services Division. This latter Division became responsible not only for assisting boards and schools in working through the curriculum, but also for the effective delivery of Ministry programs and policies, and for initiatives designed to improve accountability for both Ministry programs and student learning. A sub-unit of this Division was the new *Program Implementation and Review branch* specifically "committed to monitoring current programs in Ontario schools and keeping the public informed about the effectiveness of the educational system" (Annual Report, 1987-8). Specifically, it recommended an ongoing cyclical process of curriculum review, development and implementation phases (CRDI) to assist supervisory officers in local jurisdictions in the development and refinement of local curriculum management procedures.

As foreshadowed in the previous period, the Ministry began to take an increasingly intrusive role into various areas of school-related activities over the 1980s. This was reflected in its reactions to the SERP committee's call to combat disruptive behaviour, chronic absenteeism, vandalism, drug abuse and alcoholism among students (see Annual Report, 1982-85).[4] However, due to the Ministry's desire to avoid a policy of elite decision-making, the result was a continued expansion of committees, task forces, and bureaucracy in general. By the third year of Liberal rule, there was no less than twenty standing committees to deal with various aspects of school

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[3] In 1983, the Ministry fused the Elementary, Secondary and Continuing Education branches into one curriculum unit for efficiency and cohesion of focus to meet the more complex role it was supposed to fill.

[4] These issues were dealt with through an increased use of task forces and committees. Updates of these groups are detailed in the Minister's Annual Report throughout the 1980s. See especially the ones on Drug Education, FSL, Guidance, the Linkage Program, Multiculturalism, Native Education, Personal Life Management, Sex-

policy, and the Ministry explicitly stated its intentions of extending the circumference of stakeholder involvement to include the community and the private sector (Annual Report, 1987-8). As part of the Liberals mandate to put more money into the educational system, the Ministry began a number of new initiatives entitled Partnership in Education. This included such projects as a Transition to Employment Fund, Industry-Education Councils, Adopt-a-School Programs, and a Grant-Eligible Microcomputer Systems (GEMS) program. All were based on a system of funding from private enterprise.

This system of change, however, proved aggravating to the public at large. Year after year, the OSIS document committees dragged on (see next section for timelines). The Ministry's Annual Report gave constant assurances that change was happening, but deadlines seemed to consistently run over or be left vague (Gidney, 1999, p. 185). Public criticism began to emerge that the Ministry's objectives were becoming hazy and esoteric. It was felt that the Ministry had needlessly watered down definitions and terms to such an extent through "committee thinking" that there was "no single definition of what constituted basic knowledge and skills" (Lawton & Leithwood, 1987, p. 16). Leaders of the private sector, feeling that this continued debate had just muddied the waters, began to raise questions about the relevance of education, quality and cost of elementary and secondary education.

Role Stereotyping, SGIS, and Values Education. The reaction of most of these committees resulted in a number of booklets or additions to the OSIS code of behaviour.

Features of the Period:

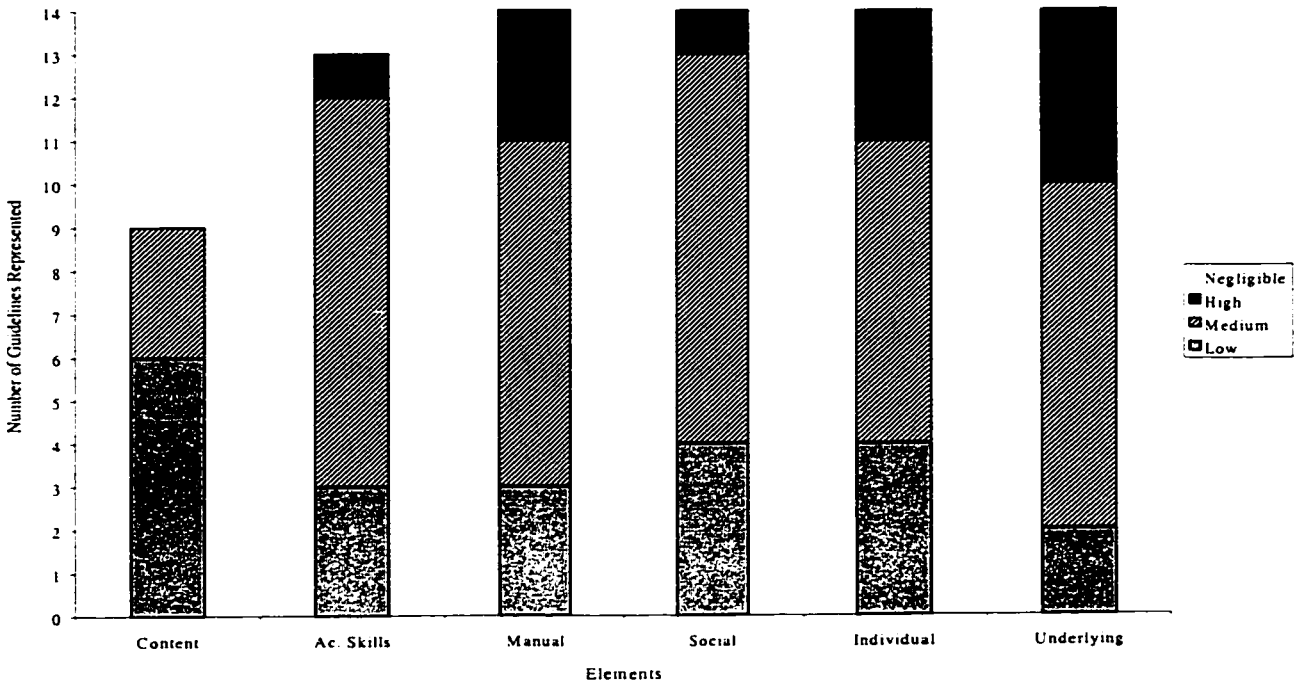
In total, 12 subject guidelines and the Circulars OSIS I & II will be reviewed as representing this period. All committees were begun at the end of 1982/beginning 1983 and concluded as shown below. Each document was based on the 13 premises put forward in Circular OSIS.

	1983	1984	1985	1986	1987	1988	1989	1990
Guidelines	OSIS I						OSIS II	
English	Planning	Draft	Validation	Revision	Released			
Business	Draft stage	Validation	Validation	Released				
Computers St.	Released							
Family St.	Planning	Draft	Validation	Revision	Released			
History	Reviewing ROSE	Planning	Validation	Released				
Math	Writing stage	Revision	Released					
Music	review of 78-9 report	Draft	Validation	Validation	Validation	Revision	Revision	Released
Science	Under way	Revision	Revision	revision	Released			
FSL			Validation	Revision				
Geography	Underway	Planning	Draft	Validation	Revision	Released		
Phys Ed				revision				
Tech		Revision	Revision	Released				
Guidance			Released					
Visual Arts	In progress	Revision	Revision	Released				

Analysis of Dimension A: Elements Used During Integration

More than any previous period (or indeed any later period), OSIS endeavored to pay due attention to all the elements (with the exception of content). Each OSIS document consolidates and tries to build on a set of ideas, skills, and values. There are only two drawbacks to this undertaking, however. The first is that to reach across the curriculum and include all stakeholders' opinion, the definitions of these elements becomes far more widened and generalized. The second is that because so much more must be included, each document runs into a hundred pages, resulting in a thousand-page integration and synthesis effort on the part of the teacher.

Graph 7.1 - Dimension A (Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

Systems Approach Results in Strong Subject Unity

During this period, the Ministry clearly viewed the curriculum as a unified system. Not dissimilar to the philosophy of Period 4, it nevertheless displays a far more sophisticated handling of subject interaction and overall coordination. At the centre is Circular OSIS, which lays out what courses were to be taught, how they were to generally interact, and what skills, values and ideas were to permeate throughout the program. It is from this hub that all subject specific documents emerge, each to play a certain part in the education of the student. Rather than treating subject areas as wide "grab bags" (as seen in Period 5, for example), the Ministry breaks the various disciplines into two categories. Certain subjects (namely Mathematics, Technology,

Business, History, Science, Art and Geography) are viewed as fairly specific bodies of knowledge that should be taught in a specific course-time. They are also considered branches of larger groupings. History and Contemporary Studies, for example, are considered part of a larger Humanities/Social Science field (7G-2, 7G-3, 7G-7). Art is also seen as an integration of studio, design and art history (7H-4, 7H-15), while Technological Studies and Business Studies see themselves as "programs" rather than mere courses. To draw connections, enhance meanings and avoid overlap, a certain amount of integration is promoted by the documents themselves.

The second group of guidelines appears to view each subject as both a course that must be taught in a specific class time, but also a process that should pervade the entire curriculum. This can be seen in English skills especially - reference is made in the Language document itself (7K-47, 7K-52), Circular OSIS, and each subject outline. A similar balance is attempted in Guidance with career education, in Music, and in Family Studies. These do not have the backing of the other course documents, however, and appear to have less effect than English.

Student-Centred Unbalanced

As to be expected with the acceptance of a systems approach, the human element has begun to taper off. While the Circular OSIS makes recommendations that students should participate in curriculum creation to help shape it to individual needs (7A-9), the enthusiasm for a student-centred (i.e., controlled) approach varies between the specific guidelines. Some courses are highly sensitive to student collaboration. Basic English and Guidance go so far as to let students choose their own goals (7B-9, 7B-13, 7B-14) and help plan the course (7J-33, 7J-37), while English encourages the methods of "interactive" and "Independent" learning (7K-56, 7K-67). Science, Geography and Music also promote student-centred programs through individualized instruction (7L-28), the inquiry method (7L-54), self-direction (7L-64, 7L-65) and self/peer assessment (7L-71, 7M-40). To a large extent, however, the beliefs from the previous period concerning adolescent needs are perpetuated in OSIS. Each guideline expresses a desire to

attend to students' level of aptitude, to show the relevance of the subject matter, and to sequence the learning appropriate to student development. The English document does the most to explicitly reveal that Ministry's hope – it states that teachers should train students to pass gradually from dependent to independent learning as they go through the education system (7K-67)

Social Continuity Left Vague

While "values" becomes a much talked about issue throughout OSIS, very few solid beliefs are actually referred to in any detail. Occasional nods are given to the maintenance of the status quo, keeping good social relations and respecting authority (7A-5, 7A-8, 7B-20, 7B-21, 7G-9). However, the Ministry still obviously feels that the inculcation of these beliefs should be kept out of their realm of concern.

Political Change a Planned Process

The one realization that gripped the Ministry throughout this period was that the world was changing. To adapt to this, it recommended that new skills had to be integrated into the school system. These would include learning about new technologies (namely computers), learning how to read the media, leadership training, and how to be adaptable enough to hold several different types of jobs. New policies, put out by the government, also reinforced sex equity and multiculturalism throughout the guidelines. However, each are usually given separate sections in each document rather than integrated into the body of the text.

Analysis of Dimension C: Loci of Integration

Due to the Ministry's attempt, in the previous period, to create a system that could be accountable while being inclusive, stakeholder involvement in the curriculum design and implementation process mushroomed throughout the late 70s and 80s. OSIS can be viewed as a natural evolution of this phenomenon. For the documents to reach the hands of the teachers, a rigorous and fairly lengthy process had been instituted to make certain that the sentiments, content, and teaching approaches reflected valid contemporary and scholarly thought in Ontario. Based on recommendations from the SERP and ROSE reports, Circular OSIS was the first module of the new program to be created. Curriculum committees were then mandated to use this document as an inspiration (especially the 13 goals of education) for each guideline. Each subject then went through a formalized process of curriculum review, draft, validation and revision before it was ready for distribution to the school boards and schools. As shown in the "features" section, this process included an unprecedented amount of co-creators from a varied background. It also took an unprecedented amount of time to go from draft to final revision (in the case of Music, 8 years). Through the guideline, the Ministry mandates that certain objectives must be taught, a certain amount of integration must take place (7A-36, 7A-42) at certain times (7A-43).

Once received, each school board then has the authority to rework and adapt the guidelines for their localities. This may include the introduction of new expectations, the clarification of the documents, the creation of resource guides, or the selection of concrete material and teaching approaches that may best fulfil the Ministry's objectives. It may even include the complete reworking of the document to create a new course outline altogether (7D-4). A sizeable staff was needed at the board level to help realize its new role. As well, boards were now expected to take on important positions for implementing these changes at the local level

(see Dimension F & G). The Ministry recommended that they use the CRDI model in order to treat the board's jurisdiction like a system in order to get proper feedback and how to react accordingly. Although implementation is primarily a board responsibility, the Ministry's regional offices were also allowed to give support. This included clarification and interpretation of policy, monitoring of board's review, development and implementation processes, provision of direct services in the areas of curriculum, supervision and business and finance to small boards lacking such services.

Schools were also expected to re-interpret the incoming guidelines. Programs were to be set up (namely English programs, guidance programs, computers, multicultural and sex equity policies) as a shared responsibility of students, teachers and parents (7A-3, 7A-4). Coordinated by the principal, committees were given the authority to plan the curriculum in even greater detail. At this level, integrative possibilities between subject areas may be discussed and larger theme-based activities may be planned. Of paramount importance, however was that the school (and its sister schools as organized by the principals) had a certain amount of objective alignment between the subjects and teachers.

What had been created during this period, therefore was a sequence of concentric layers of curriculum policy going from the outermost, general layer (the Ministry) and getting more detailed as it reached towards the most specific inner layer (the classroom). However, this change also did much to topple the preeminence of the classroom teacher as chief integrator. While the individual teacher was still considered an important figure as a "front line" worker, it was also hoped by the Ministry that a great deal of the guess-work has been removed from the curriculum by the time it reached that level (through mandates, policies, committee decisions, and so on). Viewed less as lone scholars and more as a team players, teacher were now expected to look towards integration practices that would involve them in school activities or at least bring them more into contact with the world outside the classroom.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

During this period, Grades 7 and 8 align themselves along an Intermediate-Senior continuum. While separate sections are given for the certain periods of adolescent development around the grade 7-8 years (7A-27, 7A-37, 7A-40), there is an overall tendency of the OSIS documents to simply have expectation build upon expectation beginning in grade 7 and ending at grade 10. This then acts as a steppingstone for Grades 11 and 12, allowing flexibility for the teacher in dealing with individual classes and students. Little reference is made to the earlier PJ Divisions, as the Ministry now appears to view Grades 7 and 8 as a beginning, not an ending.

Analysis of Dimension E: Integration Methods/Approaches

Almost every form of integration is represented throughout this curriculum. However, the emphasis and uses of these forms vary widely across the subject areas, and indeed within the guidelines themselves. Some subjects, such as Science heavily promote almost every form, while Math and Technology take a more vague, tentative stance. This divergence in opinion may be due, in large part, to the increased stakeholder involvement: each person in the committee appears to have their own point of view of how the curriculum should be connected and what form it should take. Space dedicated to the specific approaches appears to become a political issue.

Primary Forms of Integration

The two forms that run throughout each guideline are ***Harmonization*** and the ***Thematic Approach***. In all likelihood, this is because they are so highly promoted (almost mandated) by the Circular OSIS. All other guidelines appear to fall into line under this directive. The

Ministry's especial emphasis on Harmonization can be seen as a natural evolution from the obvious success of the previous period. Now, as the Ministry no longer worries about balance but more about the delivery of a curriculum unified in vision and approach, this method becomes their obvious and overwhelming choice. Being a little more experimental, themes are treated by the various curriculum committees with a little more hesitancy. While the method appears in almost every course document, it is most fervently advocated in those subjects that have used this method in the past (such as Art, English, History, Science and Family Studies). Other courses such as Math, Music, Technological and Business Studies make more of a nodding reference to thematic units.

Secondary/Localized forms of Integration

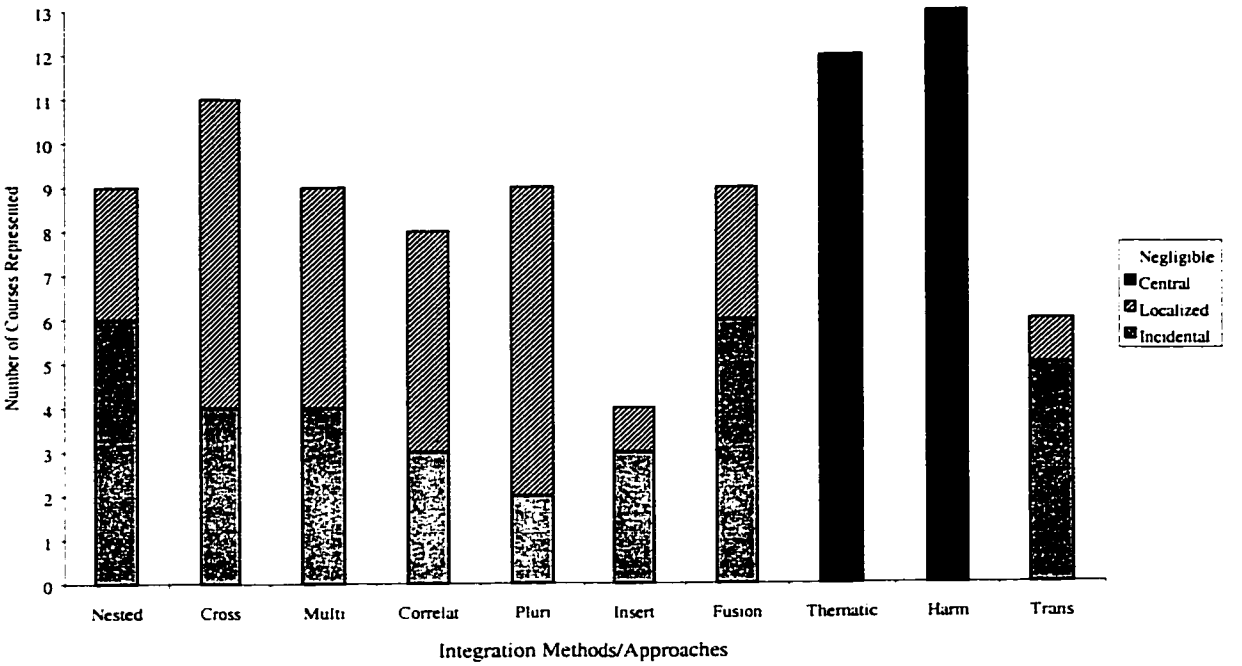
Without specific guidance from Circular OSIS, the many forms become slightly hazier and scattered across the various documents. Most ubiquitous at the classroom level are ***Cross-Disciplinary*** and ***Correlation***, which try to show concrete ways that teachers can juxtapose elements from various courses. Perhaps, more telling of the period are the ways the documents try to promote school-wide integration endeavours. In an *ad hoc* fashion, teachers are encouraged to use the ***Multidisciplinary*** approach, namely team teaching and joint planning as a way to coordinate the individual classes to reinforce meaning and efficiency. More radical, the ***Pluridisciplinary*** approach is seriously mentioned for the first time. To accomplish more uniform and systematic coordination of subject matter, schools (usually through the principal) are to create several linking mechanisms of the disparate subjects. In particular, this would include the development of language "programs" (as opposed to simply courses) and departments. The Ministry recommended, specifically a Technological Studies program (7E-13, 7E-21), a Department of Business Studies (7F-6, 7F-17), a History and Contemporary Studies program, an Allied Arts program (7H-21, 7H-40).

Incidental Forms of Integration

While the remaining forms are still mentioned throughout the guidelines, they are usually alluded to in passing. The most important of this category is the ***Nested Approach***. Like the previous period, OSIS is concerned that the courses do not degenerate into a vague potpourri to be deciphered at the individual level (leading to a myriad of interpretations). However, the Ministry believes that this can be overcome through the use of block thematic units - the exact sequencing of these units then become less of an issue and can be returned to the teacher's purview. The only concern is arranging Grade 7-8 so that a continuance of knowledge results. Beyond this, the details are left vague. This can also be seen in the curriculum committees' use of ***Fusion***. While asides are made concerning ways to combine certain subjects (7A-27, 7A-40, 7H-40, 7M-23), the phrasing leaves this form nebulous and undeveloped.

Two forms simply do not fit into the scheme of things during this period. The first is ***Insertion.*** This is because information that is deemed important enough to be included in the curriculum is dealt with in a more systematic way. To simply "stick in" content or values at random would be impossible – by this stage there are too many voices on the committee to allow this to happen. The ***Transdisciplinary Approach,*** as well, is treated very gingerly so as to give the student some extremely regimented freedom through certain independent study (7A-41, 7H-47, 7K-27) and cooperative planning initiatives (7F-22, 7J-33). However, this is downplayed throughout this period.

Chart 7.2 - Dimension E (The Importance of Integration Methods/Approaches)



Analysis of Dimensions F & G: Implementing Curriculum Integration

During this period, the Ministry built an incredibly complex network to deal with the implementation, maintenance and evaluation of the curriculum. While the assistance of teachers in classroom techniques was a concern, the overwhelming purpose of this system was efficiency and effectiveness, while not reinstating an elitist power base. As such, the Ministry tended to focus much of its time on manipulating the giant mechanism to increase its proficiency. As shown in Dimension F, most documents pay only minor consideration to the more human related problems - subject attachment, speedy implementation, work overload, and feelings of being threatened. What becomes paramount is the Ministry's concern with open communication and interaction among the various levels of the educational system. Almost all guidelines express serious anxiety that teachers may isolate themselves from the mainstream of the school, shutting

their classroom doors (see balkanization, on figure 7.6, p. 590). To combat that, OSIS exhorts them to work together, share their experiences and engage in informal mentoring as a way to keep the curriculum alive and unified. To buttress the system further, other stakeholders are brought in. Both principals and school boards are given the responsibility to coordinate local program committees, provide assistance to teachers, and to perform continual program evaluations to make certain that the system is running smoothly.[5] Lastly, the Ministry even extends a certain amount of authority to parents and students as part of a feedback loop. Students, especially, are encouraged to collaborate in the creation of specific course activities (although their participation is highly regulated within the OSIS design).

This vastly expanded network of communication does not lead to an opening of curriculum design, however. Unlike period 5, OSIS documents were not really open for change once they had passed the rigorous design phase and had been distributed to the boards and schools. They could be adapted, rearranged added-on to, and accompanied with more expectations, techniques and so forth (see Specialized Curriculum and Adaptability, p. 589). But the root documents were to be followed, not questioned. In fact, as the 1980s wore on, a greater emphasis was placed on accountability, especially in relation to testing. While the original OSIS documents, under the Conservatives, emphasized a wide range of personalized testing techniques, the Liberal party began to dabble with standardized examinations. In 1988, it was announced in the Minister's Annual Report that three levels of evaluation were undergoing experimentation. First, it had engaged 28 school boards to participate in a pilot project whereby a representative sample of student achievement levels in specific subjects could be obtained. It further stated that "some of the instruments used for the assessment of student achievement will be chosen from the Ontario Assessment Instrument Pool. Questionnaires will also be used to gather information on

[5] This is outlined in the Ministry support document Curriculum Management (1988).

instructional practices and resources from teachers" (Annual Report, 1988-9). The same year, Ontario took part in the creation of a National Indicator Program at the request of the Canadian Council of Ministers of Education. Lastly, Ontario took part in a project that made international comparisons of Math and Science.

The Ministry appears to have stepped back almost completely from any sort of direct funding or aid to teachers or schools (not that they were ever that strong on this issue in the first place). Instead, subsidies were given to school boards and earmarked for certain projects, professional development and the purchasing of resources, assistance or plant renovation. An example of this can be seen in monies that were tagged to accompany the new science curriculum at both the elementary and secondary levels. In 1988-89, the Ministry introduced the first stage of a 3-year, $13 million plan to assist school boards with the implementation of new science guidelines for the Intermediate Division (Grades 7 to 10). In the first year of the plan, $3 million was provided to school boards for the training and professional development of teachers and the purchase of science teaching aids and facilities, laboratory equipment and supplies, and learning materials other than textbooks. Along with this added responsibility, therefore, the Ontario boards became star players in the field of curriculum development and implementation during this period.

In line with OSIS' interest in the private sector, most documents also recommend that teachers and schools could find assistance and resources from the community at large. This may take the form of libraries, public pools, and greenspaces. In most cases, this would entail the use of field trips and volunteer work.

Overall Remarks on Period 7

Two elements are responsible for the form and implementation of curriculum integration during this period. Both can be seen as naturally evolving out of the change of mentality during the previous period.

1. Systems Approach to the Educational System
Foreshadowed in the previous period, the Ministry now firmly entrenches a unified educational system in an effort to ensure accountability and feedback from the various levels. This can be seen in Dimension B, where the Ministry appears at great ease with the object of subject unity but is more shaky when discussing student-centred integration (this actually seems to be a carry-over from the previous period). To avoid the elitist format of earlier periods, however, a greater number of stakeholders must be involved. To design the curriculum, a large number of people from the various educational levels are seconded. To implement and maintain the system, more authority and responsibility are given to school boards and principles. As well, the lines of communication proliferate during this period.

2. Expansion of Issues to be Dealt with by the Curriculum
As seen in Dimension A, the Ministry now felt it incumbent upon itself to deal with issues that had not previously been its concern. Almost all elements are now highly represented as important facets of the curriculum

The results of this change in mentality can be inferred as follows:

Circular OSIS acts as a prime directive - Because Circular OSIS mandates a certain code of ethics and baseline skills, harmonization becomes the towering form of integration. However, because no concrete details are given about how to implement it, it is left rather vague. As well, the Thematic Approach becomes the dominant, concrete method to apply these skills in an

organized way. It meets the Ministry's need for efficiency while giving the information some meaning. It must be acknowledged, however, that the themes are pre-made at the Ministry level and have little to do with the earlier child-centred Enterprise method.

Other Integration Methods Scattered - Because so many people were involved in the creation of the curriculum documents with no direction beyond harmonization and themes, the remaining methods become scattered and vague. Each person seemed to have had their own definition of what integration should look like, and what should be included in the documents. This unfortunately resulted in guidelines that took a painfully long time to produce, revised again and again. No doubt, integration was seen as a way to aid teaching, but it seemed that its concrete definition was left much more general than in the past. When disseminated, it is obvious that many of the variations of the term were cut, mutated or left undeveloped.

Growing Accent on Group Integration - The one variant that begins to rise during this period is in relation to integration involving two or more people. The reasoning behind this is twofold. It brings teachers into contact with the rest of the educational community around them to give assistance in their teaching method, while allowing them to be informally evaluated by their peers. It is thereby used as a check that the OSIS documents are being properly implemented.

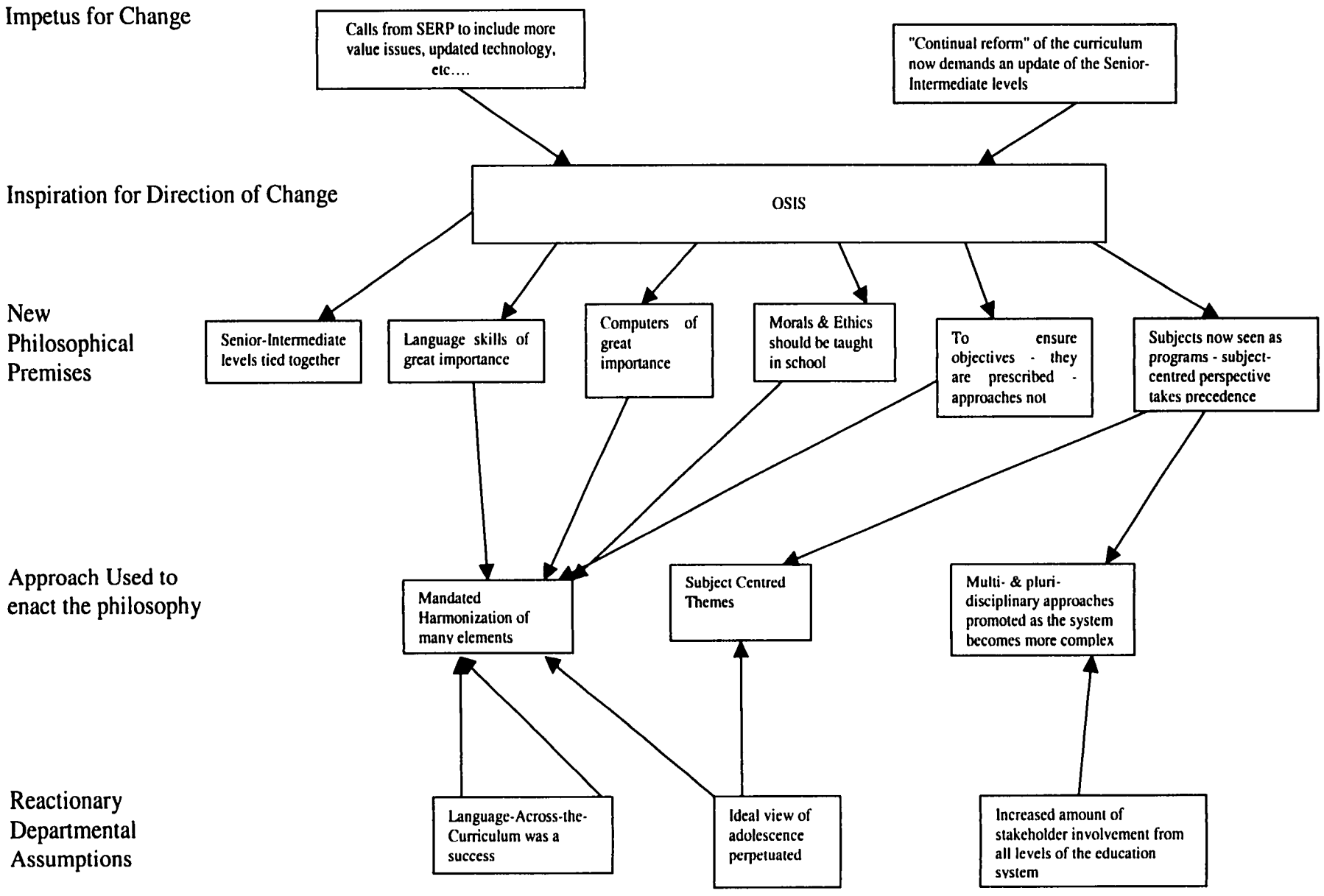


Diagram 7. Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 8

"The Common Curriculum"

1992-1996

Context for the 1992-1996 Curriculum

When the Liberals entered office, they ignored or disbanded the committees that the Conservative party had set up to investigate the problems plaguing Ontario public education.[1] To replace them, the Liberals appointed former Toronto Star editor George Radwanski to review the system, especially focusing on the dropout rate. When his report was submitted in 1987, it gave a scathing denunciation of the Ontario government's management of the curriculum:

> My strongest impression from the work of this study is that, in terms of educational philosophy, the system has increasingly been running on empty. Educators and education officials know that the premises and priorities set out in the Hall-Dennis Report 20 years ago have been overtaken by contemporary reality, but no coherent new strategy has been agreed upon to take their place. Instead, there is drift, in the form of an endless succession of improvisations, half-measures and compromises to bridge the gap between competing ideas. (1987, p. 1)

Successive governments, Radwanski said, had fiddled with the system without endorsing a clear vision of what the final product should look like. Legitimating much contemporary and past scholarship on the reunification of the curriculum, he warned that only a more holistic approach would increase student retention (for a detailed summary of the report see Gidney, 1999, pp. 172-173).

To respond to the problems that the Radwanski report surfaced, the Liberals struck an All-Party Premier's Council. Its first report proposed that the Ministry recreate the grade system to help students make a smoother transition through their education and foster life-long learning. Most concretely, the report strongly recommended that a common curriculum to grade 10 should be in place by the year 2000. Furthermore, it stated that "Ontario should emphasize educational standards and evaluation by introducing: a sampling system to monitor educational standards; province-wide benchmark evaluation to cover basic skills; comprehensive profile assessments for students [and] a report card to the public to identify achievements and progress annually" (1989,

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[1] One of the studies was being carried out by Ken Dryden, which he later published as In School (1995).

pp. 4-5). This reflected calls by the public for provincial standards assurance and national/international testing programs, the strengthening of public accountability, and a review of the overhead cost structures for education.

Based on this and other similar reports, the new Minister of Education, Marian Boyd announced in April 1989, that the government was planning to reform the education system and create a renaissance in educational thought. In order to more closely reflect the stages of student development, she proposed to split the grade levels into 4 distinct periods: The Early Years (Kindergarten); The Formative Years (Grades 1-6); The Transition Years (Grades 7 to 9); The Specialization Years (Grades 10-12). To validate the Liberals' new plan for change, she further stated that major policies would be determined in consultation with educators and the public. In an effort to provide some leadership to this process, the Ministry established the Learning Secretariat in June of that year. Assisting this position were 6 work teams[2], who in turn had access to a number of "reaction" groups representing interest groups from across the province for advice and criticism on the progress of plans and policies. In addition, work teams were to have regular feedback from the Learning Programs Advisory Council, an arm's length body further representing educational associations, business and labour.

Work on this planned change project slowed suddenly, however, when, in a surprising turn of events, the Liberals were soundly beaten out of office in 1990 to be replaced by the NDP party under Bob Rae. More than a vote for a socialist agenda, however, it was considered by most media sources at the time as a block protest against the waste, perceived corruption, bloated bureaucracy and ineffectiveness of Peterson's administration. It was hoped that a "new broom" would do much to sweep away the problems and lack of productivity created by the Liberals. In terms of the education system, the populace appeared to have looked with optimism and

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[2] One each for "The Early Years", "The Formative Years", "The Transition Years", "The Specialization Years", "Technological Education", and "Careers".

expectancy to Rae's campaign promises that he would create a unified, simplified curriculum, and that he would streamline the bureaucracy to make it more efficient. The question that remained, however, was how an NDP government could attempt this within the confines of the party's philosophy.

The first issue, that of curriculum, was tackled by the NDP almost immediately. Created by a number of seconded educational theorists, an initial draft of "the Common Curriculum" was circulated in February 1993 as a working document to schools, parents and the general public for feedback. In an accompanying press release, Rae announced that it would herald a revolution in education (1993). As a central curriculum, it would not only cut down on overlap, but as everyone was following the same document, it would also cut down on confusion. Furthermore, it was to be based on "Outcomes-Based Learning", a new educational method focusing on the student achieving certain results rather than passing a certain amount of coursework. No longer would the curriculum build upon itself (as Curriculum I:1 or OSIS had done) in a stumbling evolutionary format, but that this newborn document would be the dawn of a new age (for a detailed account of these early NDP days, see Gidney, 1999, pp. 209-219). Difficulties arose in its delivery, however. While the Minister's Annual Report in 1992-3 had expected to begin implementing the curriculum in September 1993 for a full, system-wide implementation by 1996, ongoing revisions to the document began to bog this process down. Many parents and teachers complained the document was too vague. Even Rae, himself, admitted that he, too, didn't "understand a lot of the jargon" dubbed by the press "edu-babble."[3] The final version of the Common Curriculum was finally released in 1995.

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[3] This was pointed out by Rita Daley of the Toronto Star in her 5 June 1993 column "Today's lesson: C-U-R-R-I-C-U-L-U-M". Gidney (1999, pp. 221-223) points out the numerous critics who commented on the jargon-filled draft copies of the document.

Bureaucracy posed a singular problem for the NDP. On the one hand, Rae had promised to cut waste and streamline the educational system. On the other, the party was tied by the socialist agenda, which necessitated an increased amount of government intervention in the various facets of public life. This was made quite clear in the Minister's Annual Report of 1990-1, in which he announced that the Ministry intended to expand its sphere of influence "to better integrate social services with educational programs" (p. 12). To meet this increased responsibility, the Ministry merged with the JobsOntario Training program in February 1993, and expanded to include no less than 5 divisions (each made up of numerous teams, projects, and an increased administration in general). While the Ministry emphatically stated that the reorganization would "result in the provision of better services to the education community at considerably less cost" (Organizational Overview, 1994), most media pointed out the enormous increases in government spending to support these changes.

In finding ways to streamline the system, therefore, the NDP primarily targeted school boards as being especially wasteful of funds that could be more properly allocated directly to schools, themselves. In past decades, officials had defended the necessity of board-level expansion in order to fill the vacuum left by decentralization. After a decade of economic recession and the reassertion of power by the Ministry, however, boards were finding it more difficult to justify some of its activities.[4] They could not deny the public allegations that much duplication of tasks was taking place – this extended to curriculum design. It was, perhaps, inevitable that a final struggle would ensue in which the Ministry would regain central control of the curriculum. However, during this period, the Ministry took a very conciliatory approach to solving this problem. In 1992, it announced the creation of a Transition Assistance fund that boards could draw on to help consolidate their internal organization for more efficiency (1991-2).

[4] One area that was to come under increasing criticism was trustees' salaries in certain large boards (reaching close to $100,000/year in some boards).

Even as the returns on this funding proved less than encouraging with boards proposing mostly superficial changes[5], the NDP continued its policy of voluntary restructuring and earmarked additional funds to the Transition Program in April 1994 (for the details of the NDP's struggle with board amalgamation, see Gidney, 1999, pp. 192-197)

Features of the Period:

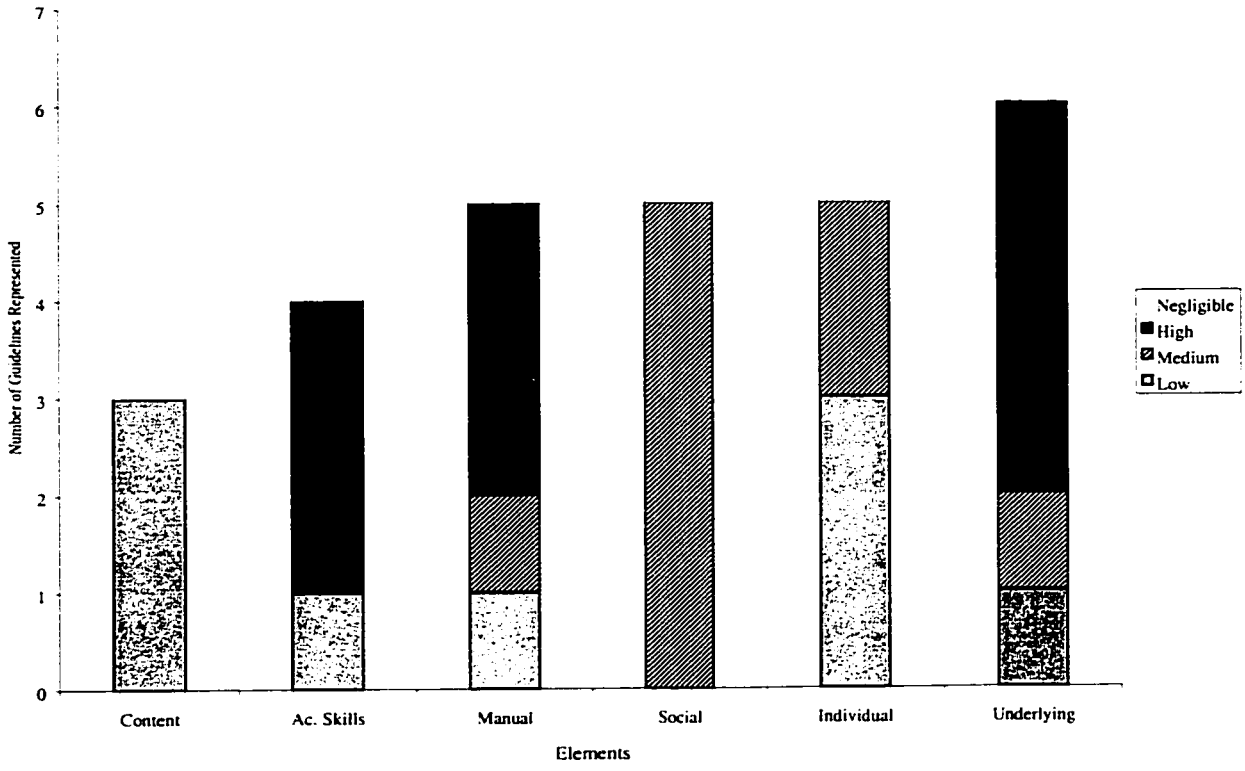
The only mandated curriculum guideline document created during this period was The Common Curriculum (1995), after going through a draft period (1993-5). The other two documents that are used in this study are resource guides created to assist the teacher in the various aspects of the curriculum. The first is central to the definition of curriculum integration. Entitled Towards an Integrated Curriculum: A School Resource Guide (1993), it is the first document in 60 years to concretely address the issue. The second deals with another illusive area of the curriculum: Education about Religion in Ontario in Public Elementary Schools (1994). Lastly, the brief report The Transition Years, Grades 7, 8, 9 (1992), lays out the government's plan to rearrange the grade system.

[5] In April 1994, the Minister announced that 50 out of 172 Ontario school boards had reduced their number of trustees. The total number of trustees fell by 106, from 2129 to 2023. This represents a decrease of 5 per cent (Annual Report, 1994-5). Most board-level reports proposed a measure of cost sharing between boards that would still leave them fairly independent (see Wells' Report, 1 March 1994). Cooke also called on boards to share busing, curriculum development, payroll processing, purchasing, and technology.

Analysis of Dimension A: Elements Used During Integration

Quite clearly, the Common Curriculum signals a great change from the previous OSIS documents. Rather than trying to maintain a balance between the various elements, the Ministry during this period made some strong choices based on a focused ideology. Both Content and Individual Development virtually disappear, to be replaced with a desire to inculcate a number of Underlying Principles (of equity, multiculturalism, environmentalism and ethical practices). The divide that used to exist between Academic Skills and Practical Skills no longer exists, but are merged together to train students to face the changing world. Social Skills are also deemed necessary to teach students how to adapt to this new "global village".

Graph 8.1 - Dimension A (Importance of Elements used during Integration)



Analysis of Dimension B: Objectives of Integration

More than in any previous period, the curriculum documents devote an extremely large amount of space to explain why integration should take place. As such, the definition of the term becomes complex and all-encompassing to the learning process. Most importantly for this study, there is some acceptance that differences exist in how various educators define and utilize the integrated approach (8B-7).

Subject Unity Becomes System Unity

The Common Curriculum explains that, in the past, the curriculum was based on a disciplinary system. This meant that information had to be channelled and isolated in particular subject areas (bodies of knowledge), taught by subject specialists. In doing so, however, the system became monolithic and unresponsive to the changes in the world outside academia. During this period, the Ministry made a conscious decision to step away from this method of education and embrace the more experimental "Outcomes-Based Learning" in an attempt to force the system to become more flexible:

> In outcomes-based learning, curriculum refers to the varied experiences by means of which students achieve a set of defined outcomes. Students do not attain the outcomes through a set of prescribed learning experiences in one program area or in one grade; they attain them through a wide range of experiences encountered over several grades. These experiences, moreover, will include varied content drawn from all program areas. It should thus be clear that there is an essential link between outcomes-based learning and an integrated curriculum (8A-67)

In divorcing all goals of education (defined as the students' "achievement of certain results") from the root subjects, the Ministry hoped to bring down the walls created by past conventions long since obsolete. Now, as the outcomes became the sole product desired by the Ministry, curriculum integration was seen merely as a tool to achieve these ends efficiently and to help point out the connections between these outcomes. However, it is an important tool - otherwise, the disparate outcomes out would become just as fragmented as subjects.

Using the outcomes as building blocks, the curriculum then creates certain tentative areas around skill groupings (namely Language skills, Math/Science skills, Artistic skills and "Self" skills – 8D-32, 8D-95). However, while these classifications are to exist in the minds of the teacher, they are not treated as independent bodies (given specific space on the timetable, etc). Even more than the previous OSIS documents, the associated Common Curriculum resources view the curriculum as an interconnected system (see sections especially on Mathematics and Self & Society 8D-361, 8D-362, 8D-373). Certain outcomes span all areas and should be transferred and reinforced across the school day (8B-5, 8D-78, 8D-79, 8D-80, 8D-102, 8D-121, 8D-137). Language, for example, ceases to be a subject and becomes a skill, underlined throughout the curriculum (8D-156, 8D-169). In other resources, the Ministry recommends that outcomes can be doubled up to alleviate problems of timetable overload, adaptability and fragmentation (8B-6, 8C-7)

For all its protests against a subject-centred curriculum, however, the Ministry does still maintain that certain natural commonalties exist between subjects and that "artificial or forced integration should be avoided" (8B-19). Rather than creating them, the designers should look for them and they will surface (8B-20). Connections are seen as existing between math, science and technology (8D-263), and with other program areas (8D-263) such as the Arts, and social sciences (8D-264).

Political Change Becomes a Driving Force for Integration

Throughout this period, the integrative approach was accepted whole-heartedly as a panacea for most of the ills of teaching any subject and its use was advocated in almost every situation. This is promoted in both the resource document "Towards an Integrated Curriculum" (8B-1, 8B-2, 8B-4), and throughout the Common Curriculum itself (8D-30, 8D-31, 8D-59, 8D-60). Both go beyond the usual reasoning for an integrated curriculum, however, which typically cites the cause of integration as bringing subjects together. Here, they see it as an entire world-

vision. While teachers were allowed to begin with the segregated course structure, the Ministry mandated that the new program must be organized in such a way that the interrelationships among subjects and topics are evident and meaningful to the student (8A-4). It was hoped that as teachers became more and more comfortable, the discipline-based system would eventually be shed, and that they would ultimately move "towards an integrated curriculum" (8B-10). The belief of the Ministry was that the natural tendency of mankind was integrative. The mind seeks out patterns and education should mimic this process (8B-4). Everything must come together for inevitable sense to be derived - all subjects, all skills, families, communities, the environment, society (8D-53). They reasoned that students must view the world (and thereby life) as an integrated whole. By linking students to the whole world, therefore, and showing them that it is changing constantly (8D-102), it was hoped that they would not only have a "global perspective" but also be prepared for change and come to the realization that they must be lifelong learners (8D-16, 8D-73, 8D-16). To do this, the Curriculum continually reinforced the premise that students must not look at the world as disassociated facts, but as something that is composed of "systems" of various sizes (8D-286, 8D-287, 8D-291, 8D-292, 8D-297). Alone, Outcome-based Education could not attain a meaningful, synthesized curriculum (more goals would just be added or dropped). It is only through the integrative process that masses of new information, values, perspectives (see Dimension A) could be brought into the curriculum and neatly slotted into the new world view. (8A-4)

Social Continuity Not Mentioned or Wanted

Driving this period is a feeling that the world is changing, whether we want it to or not. To put stock in the "tried and true" methods or figures of authority is merely to be damned to obsolescence. Therefore, any remaining aspects of social continuity were eschewed in this curriculum as outmoded.

Student Centred Education Left Vague

The documents frequently mention that the changes being made were done in order to meet the needs of the students (8A-4, 8B-1, 8B-4). However, it seems that the Common Curriculum is a finished package by the time it gets to them. Their job is merely to achieve the prescribed outcomes. While local issues are dealt with, the Ministry seems less interested in dealing with students' idiosyncratic desires and more with equalizing their environments so that all may learn equitably. One policy of "Education for the Whole Person", for example, states:

> To maximize the learner's potential, an integrated approach is required, one that meets the needs of the whole person. Children who come to school hungry, young people who are troubled and neglected, and adults with economic or family problems all face barriers to learning. In education, the students' personal concern can no longer be separated from their ability to learn well. (Minister's Annual Report, 1990-1, p. 12)

Therefore, while some mention is made of including student interests (8B-9, 8D-209) education is viewed as something that is "done to" students rather than something that emanates from the students themselves.

Analysis of Dimension C: Loci of Integration

While for most of the century a dialogue between two stakeholder levels, namely the Ministry and the individual teacher, had decided on the creation and maintenance of curriculum (and the development of integration methods), this balance is now broken. In part, this can be seen as a natural evolution of the procedures devised by the previous two periods. Under the Wells administration, the Ministry had mandated that each level of the educational system play a part (either through direct actions or indirect recommendations) in the decision-making process concerning curriculum integration. By the time the OSIS documents were in place, a huge array of groups, federations, boards and teachers were involved in their creation. Similarly, for the guidelines to get from Ministry to teacher, they were sifted through several layers of board and

school-level committees. The NDP appear to realize this system as too bureaucratic and slow moving with not enough benefits (see Context of this chapter). However, being in a precarious position as a newcomer to power and realizing how entrenched the system had become, they can only make hesitant motions to streamline operations.

This mixture between the competing drives for inclusion and for clarity/efficiency can be best illustrated in the creation of the Common Curriculum document (1995). The first draft was first completed by a fairly small vanguard of Ministry and associated writers in 1993. It was then distributed to an extremely wide circle of groups and organizations (p. 110) including those that had never before been affiliated with Ministry projects, most likely in an effort to accurately reflect the views of the Ontario populace. Responses were then synthesized by a Revision Team composed of a co-ordinating group, and groups for the Arts, Language, MST and Self & Society. Finally, a Review Committee scrutinized the document. It must be noted that by this stage, the stakeholder pool had shrunk considerably - all members of these committees belonged to either the Ministry itself, a school board or a teachers' federation.

The school board has, by this period reached the peak of its influence. It is given the responsibilities for proper implementation and tailoring of the curriculum policies including the Transition Years (8A-2), the religion program (8C-5, 8C-6) and the Common Curriculum (8D-65, 8D-87, 8D-97, 8D-234, 8D-235). The Ministry, in fact, earmarked an annual expense of $30 million to the boards to aid them in redesigning the curriculum for its locality. Above this, boards were also given almost exclusive rights to in-service teachers under their jurisdiction (8C-13, 8C-14), and the ability to create advisory committees for local initiatives (8C-16).

According to the Ministry, the school-level is where the hub of curriculum integration should be taking place. Under the tutelage of the principal, teachers' groups should be set up to plan ways of finding interrelationships between what they are teaching. Arranged in teams of 6 (no bigger), the resource document "Towards an Integrated Curriculum" recommends that

participants should be allowed ample time to understand the process, find out what's being taught in various subjects, find links, and consult experts when necessary (8B-15, 8B-19). The object of all this is to bring all teachers' ideas together so as to make the Common Curriculum a joint venture based on shared understanding. Of course, with the meteoric rise of one level of input came the decline of another. Little attention is paid to the solitary classroom teacher during this period. The design of the Common Curriculum, in fact, actively discourages him or her from following just the Ministry documents in isolation. It would lead to an overload and severe anxiety. Rather, the creators of the guideline saw it as a forum for discussion at the school level – a beginning that should be developed by a group.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

Grades 7 and 8 are now drawn back into the elementary system through the unified Common Curriculum (covering Grades 1-9 inclusively). Outcome follows outcome in the hopes that the students will be always progressing forward from the known to the unknown. As such, an underlying continuity pervades the system up to the first year of secondary school. Three junctures are presented in this continuum, however. The Ministry proposes that students should be tested for the prescribed outcomes at Grades 3, 6 and 9. This allows some accountability in the system while maintaining a great amount of flexibility in achieving these outcomes. As seen in the last stage, entitled the "Transition Years", outcomes are not relegated to one year but can be taught at any time during the three years. This places the onus on the teachers to meet, discuss and decide where the outcomes will be placed in the sequence of class work, allowing a great amount of integration between the three grade levels.

The term "Transition Years" suits the position that the Ministry had given to the Grade 7-9 arrangement during this period. While it is definitely insulated from the lower or higher grades,

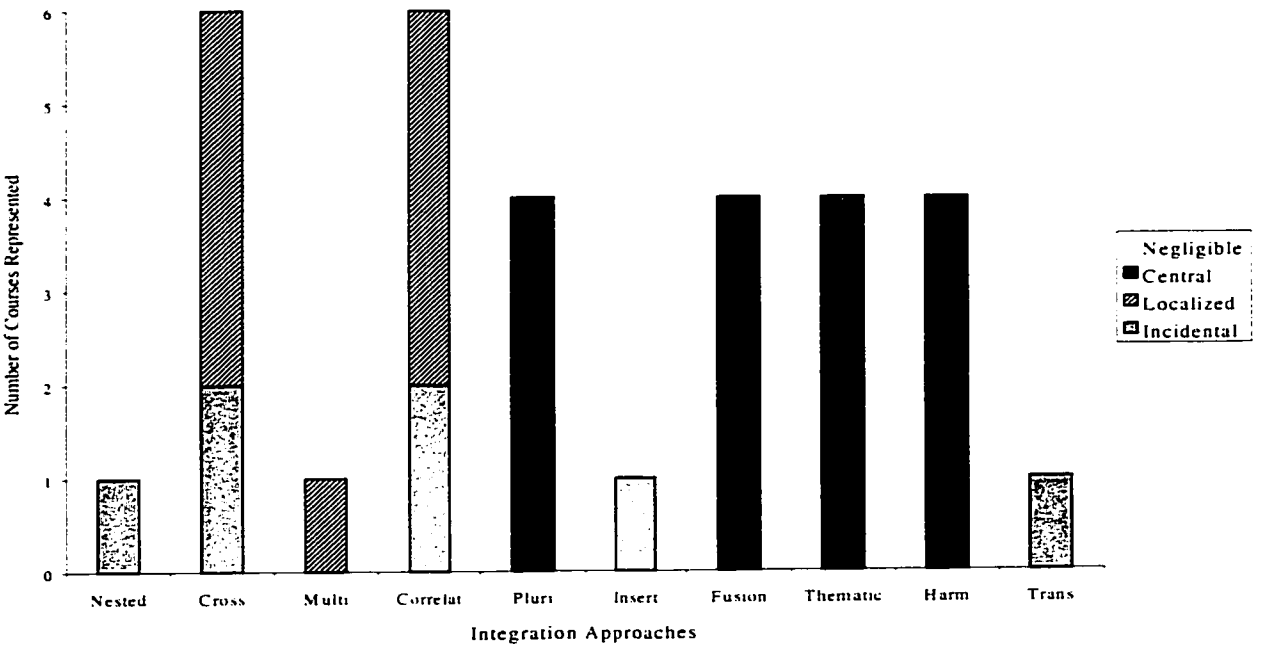
it is not seen as an ending of a certain stage of education (as Period 1 and 2 had been) or the beginning of a new stage (as Period 7 had been). Rather, by including grade 9 in the calculation, the Ministry creates this phase of the students' education as a hinge between the two.

Analysis of Dimension E: Integration Methods/Approaches

The creators of the Common Curriculum did not believe that integration could just naturally happen within a system that was divided along traditional disciplinary lines. This would just push the burden of integration down to the classroom-level, resulting in a mere mish-mash of *ad hoc* measures. Even with a great amount of encouragement in this situation, a teacher who was isolated in a 45-minute subject setup would never progress beyond the nested or correlation approaches. They, therefore, recommended that the influential forms of integration should come from the higher levels of the education system. Most importantly, they ***Fused*** the previously separate subjects into 4 learning areas, based on shared skills. Recognizing that this was a radical change to the system presently in place, they proposed an evolutionary format to reach this desired state of education. To begin this long trek to complete integration, schools were allowed to maintain a disciplinary organization of courses. However, they must begin to make connections immediately between what they are teaching and the other areas of the curriculum (***Correlation and Crossdisciplinary approaches***). At the same time, each school is encouraged to organize and relate courses naturally through shared outcomes. As such, teachers are to start thinking in terms of an Art program (that relates Art, Music and drama courses together), a Math, Science and Technology grouping, a Language grouping, and a Self and Society grouping (that relates all the personal subjects together such as Family Studies, Geography, History, and Physical Education). Committees are encouraged to work together to come to some shared

understandings and ways of dealing with outcomes (***Pluridisciplinary and Multidisciplinary[6] Approaches***). Furthermore, teachers are to erase boundary lines through the use of joint ***thematic*** projects, and outcomes that span the curriculum (***harmonization***).

Graph 8.2 - Dimension E (Integration Methods/Approaches)



The Common Curriculum stands apart from the other periods in that it does not view each form as an end in itself, but as merely a stop-gap measure to reach higher and more intense ways of integrating the curriculum. The reader is almost led to infer that the Ministry would eventually like to see all boundaries fall away one day to make room for a totally ***Integrated Day.*** Of course, this is in total harmony with their philosophy outlined in Dimension B – integration is not simply the interrelationship of one element or subject, but the bringing together of all things and people to the centre for communion and reunification. For it is only here that true meaning can be found.

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[6] The multidisciplinary approach is of towering importance during this period – however it is left implicit. It stands to reason, however, that if more than one teacher will be teaching the same group of students, they will

Analysis of Dimensions F & G: Implementing Curriculum Integration

The Ministry appears to have been quite concerned with certain aspects of the implementation process of the Common Curriculum while downplaying others. This may be due to the NDP's dichotomous agenda mentioned in Dimension C. Certain aspirations build on the preceding period – this is especially true of the Ministry's desire to include a great number of stakeholders in the process. Both boards and principals were marked as central roles in the successful maintenance of curriculum policy. As well, parents and the community were brought on board to help the programs run smoothly (by 1993 parents committees are mandated policy). Most importantly, the Ministry promoted teacher teamwork as the best way to overcome balkanization and subject attachment. These all hearken back to sentiments expressed in the older OSIS documents.

Alongside this, however, is the NDP's desire to have the educational community accept the new curriculum, considered quite radical in approach and objective. To facilitate this process the Ministry employs a combination of firm and clear direction with a great deal of financial recompense. While adaptability of approach is given much credence, the outcomes are considered untouchable. Furthermore, to ensure that these outcomes are taught, the Ministry began, at this time, to re-install a standardized testing system (not seen since 1938), Language/Mathematical standards, and National Achievement Indicators (see Annual Report, 1993-5). Foreshadowing events of the next period, the Ministry indicated that these were only tentative steps on the way to a greater ideal. In October 1994, Minister Cooke stated that:

> Although the test results are encouraging, we believe we can still do better. The ministry, school boards, teachers, parents and the community all need to work together to raise the level of reading and writing skills in this province. ... We're committed to testing as an important means of improving the skills of Ontario students. We have gained valuable experience from the Grade 9 Reading and Writing Test that we can use as we plan the expansion of our assessment program (press release).

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have to be constantly meeting to straighten out who teaches which outcomes.

Recognizing the revolutionary nature of the reforms, it does give certain allowances - for example, a fairly broad lag time for implementation (3 years). As well, an enormous amount of money was earmarked for aiding the installation of the curriculum into Ontario classrooms. School boards alone were given $30 million to create added resources to help teachers interpret the curriculum. Even as late as April 1995, Cooke was announcing an additional $2 million in funding "to support the development of expertise and resources needed to deliver the province's new Common Curriculum" (press release, 25 April 1995). The funding, which was channeled through the Common Curriculum Innovation Fund, was spent in three different areas: In-servicing, increasing access to material and human resources across the province, and supporting projects designed to tell parents and the general public about curriculum changes. At the time, his comments reflected the Ministry's merger of the two desires for inclusion and direction:

> I'm impressed by the kind of collaboration that the work on the new curriculum has generated. It will help build local, regional, and provincial networks of key partners across the province which will be powerful mechanisms for teaching the new curriculum (p. 1).

Overall Remarks on Period 8

In this period, the NDP quite obviously attempted to pick up the gauntlet that Radwanski had thrown down in 1987. In trying to create a holistic approach to education, however, the Ministry only made it half way. It can be inferred:

1. The Common Curriculum a Revolutionary Vision of Integration

At the core of the new curriculum is a certain philosophy of integration that has rarely been seen before. It is no longer seen merely as a tool to get the point across more efficiently (although this is still a valued consideration). It is now viewed by the Ministry as a "world vision", a paradigm where meaning is derived only when barriers are removed. The curriculum is considered a

whole, unified work of knowledge. This extends even to the uniting of people in shared understanding. This mindset is then to be internalized in the students. This may explain why little input is warranted from either the teachers or pupils (as seen by the dearth of references to the transdisciplinary approach). While teacher interaction is highly recommended, it is not for feedback, but to ensure that each teacher interprets the documents correctly.

2. Ranking the Sub-definitions of Integration

The Ministry explicitly accepts that several forms of integration exist and describes them as a continuum from least (nested, cross-disciplinary, correlation) to most (themes, fusion). While it recommends that teachers should begin at the level that makes them feel most comfortable, it believes that the general trend of education should be towards more intense forms of integration (perhaps ending in some form of Integrated Day).

3. The Ministry tries to Promote Integration through Curriculum Design

To facilitate this trend, the creators of the Common Curriculum adapted a few of the traditional structures. First, it attempted to destroy the subject-based system by introducing 4 program areas revolving around certain shared outcomes. It also tried to bring teachers together by erasing any vestiges of grade-related material. By grouping outcomes in larger packages of Grades 1-3, 4-6, and 7-9, it forced teachers of the various grade levels to meet and share the outcomes among themselves.

4. Implementation Attempted within Traditional Inclusive Framework

By trying to function within the entrenched system of bureaucracy set up during the Wells-OSIS periods, it was perhaps inevitable that the Ministry could not totally protect its ideal vision of integration from the "watering-down" process. While the ideas were originally thought through by a fairly small vanguard of writers, they were subjected to multiple revisions based on a great number of responses from many disparate interest groups (this also resulted in a myriad of underlying beliefs being included in the principle document). Once revised and distributed to the

boards, the curriculum was left open to interpretation and application (as was traditionally the case). Short of usurping the boards' power, and directly mandating the integration of the curriculum at the school level, the Ministry could not guarantee that steps would be taken towards the ideal forms. As conciliators, the NDP could only try to induce stakeholders along with promises of additional resources. And as time passed and money became scarcer, funding an ideal was becoming more difficult to defend.

5. The Inherent Dichotomy

There exists one flaw in the philosophy of those who created the documents surrounding the Common Curriculum, and that deals with the reconciliation of Outcomes Based Learning, Integration as a world view, and the NDP's policy of equity. OBE is based on an elitist doctrine in that the designers of the curriculum preconceive the outcomes. Theoretically, the boards, schools and teachers are given the sole task of finding ways of enabling the students to achieve these outcomes. The only feedback required from these lower levels, therefore, are the success rate and the effectiveness of the methods aiding this process. The policy of equity stands directly opposite from this – it believes that all participants' conviction should be taken into consideration. It is at this point that integration, as a philosophical premise, is torn in two. On the one hand, unity is based on shared understanding, synthesis emerging from different points of view to create something different. On the other, unity is something that is to be imposed on the recipients from a central designer. For the Common Curriculum to succeed this inborn rift must be mended or one half eradicated (as noted earlier, the establishment of standardized testing might give some indication as to which side the Ministry is leaning towards).

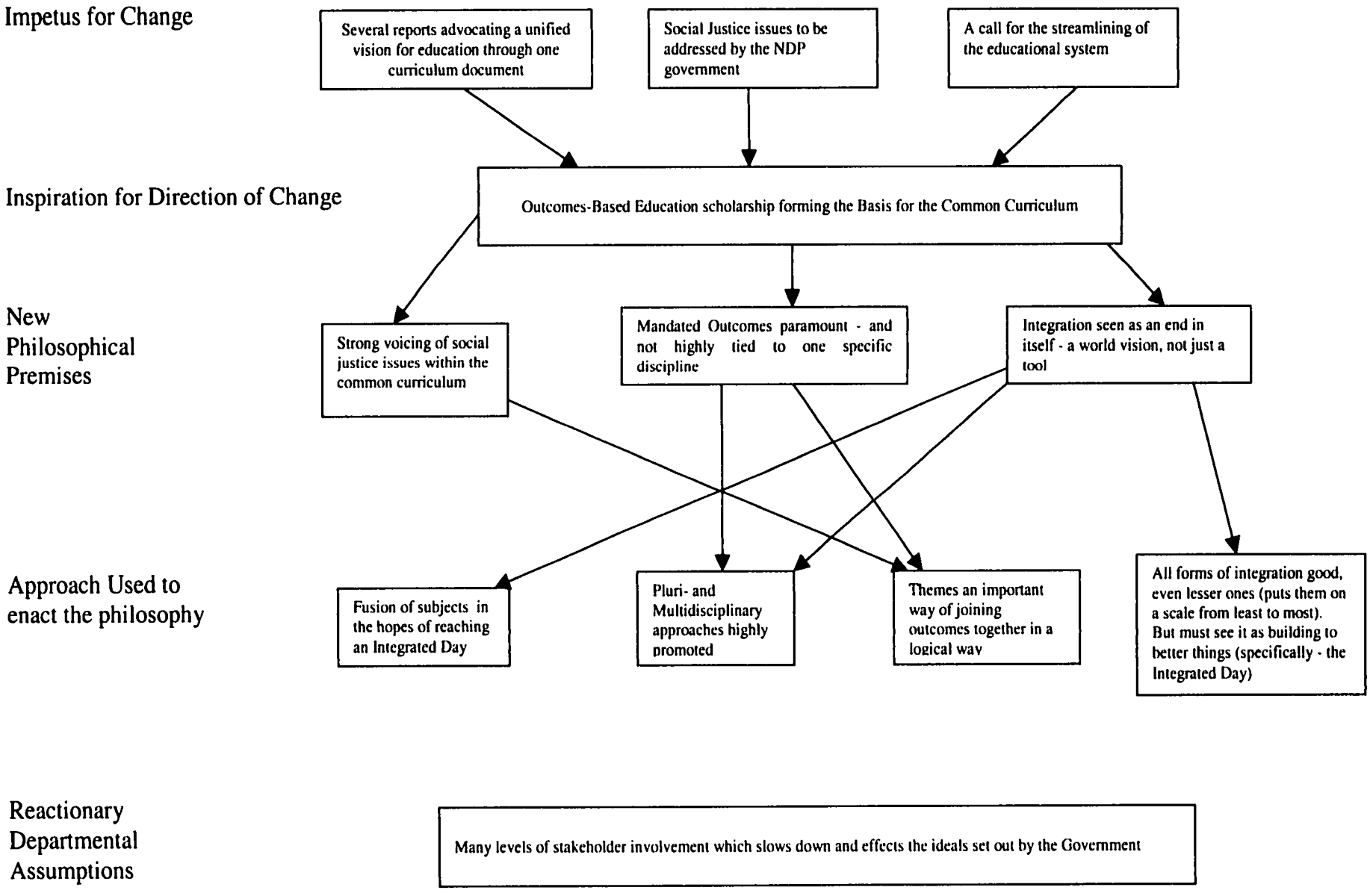

Diagram 8. Linking Philosophy to Curriculum Integration Approach

The Department of Education

Perspectives on Curriculum Integration

PERIOD 9

"The Rigorous Curriculum"

1997-1999

Context of the 1997-1999 Curriculum

When Dave Cooke became Minister of Education in 1993, he broke ranks with generations of Ministry policy and endorsed province-wide literacy tests. He explained that his change in attitude reflected the public's desire to see the Ministry play a greater role in ensuring the accountability of the public school system. At the time, he stated:

> We have been weak in this province at assessing the education system to determine whether or not we're accomplishing the goals of providing students with a good solid basic education. The way to have an intelligent and thorough discussion about the quality of education is to evaluate the system and discuss it based on real facts and not just people's impressions (Report card on Education, 1993).

That same year, Cooke established a Royal Commission on Learning with the mandate to examine in detail issues concerning accountability, governance, programs/curriculum, standards, and a shared vision for the education of Ontario students (Annual Report, 1993-94). Like the previous two commissions in this half-century, the five-member appointees were to consult with students, parents, educators, and taxpayers, as well as representatives of business and labour and other organizations and interest groups (for details, see Gidney, 1999, pp. 225-231). After sifting through 1400 written submissions and 3600 additional presentations across the province, the co-chairs Monique Begin and Gerald Caplan submitted their report *"For the Love of Learning"* to Cooke on January 26, 1995. At the time, Caplan summed up the collective change in mentality that Ontario had undergone since the Hall-Dennis Report:

> Our bottom line is that we want the vast majority of Ontario students to complete high school as literate, knowledgeable, creative and committed young men and women. Our recommendations are geared to ensuring they know how to solve problems, and think logically and critically. They will be able to communicate articulately, work cooperatively, and most importantly, will have learned how to learn. All our recommendations are designed to help every Ontario student reach this goal. But we have a long way to go (p.1).

Diversity and decentralization were no longer considered principal issues. They had been replaced by a desire to ensure that a minimum amount of knowledge and skills were being taught

to students. It was further resolved that the only way to achieve this end would be through a strong centralized authority with a clearly defined hierarchy of responsibilities, not a patchwork quilt of local initiatives. The remainder of this period can be seen as the Ministry's attempt to reach this goal.

Within days, Cooke announced a series of reforms based on certain recommendations from the report. Changes that specifically effected curriculum included:

1. ***A rerouting of curriculum control.*** While he maintained the Common Curriculum as the primary document, he stated that it should evolve into a series of documents that would make up the new province-wide curriculum for JK to the end of secondary school. Most importantly, Cooke announced that the Ministry would assume responsibility for curriculum development, and thus eliminate the current duplication of effort at the board level (press release 7 February 1995).
2. ***Comprehensive testing*** in Reading, Writing and Mathematics for Grades 3, 6, 9 and 11. He proposed this as the primary way to ensure that the system was functioning effectively. He further proposed the establishment of a new, independent office, the Education Quality and Accountability Office (the EQAO), to develop and carry out the tests and report the results to the public (press release 17 February 1995; see also Gidney, 1999, pp. 200-202).
3. A new ***province-wide Report Card*** that would display a standard way of reporting student achievement to parents (press release, February 1995)
4. The creation of an ***Ontario College of Teachers***, a new professional body (operating at arm's length from the Ministry) that would govern everyone who held an Ontario Teaching Certificate. It would develop standards of practice to form the basis for assessing knowledge of specific subjects, teaching ability, competence in English and/or French, ability to use computer technology, and familiarity with provincial curricula and policies. Cooke also

anticipated that it would regulate and take over a great deal of the professional development. (press release 13 February 1995)

5. The mandatory introduction of ***Parent Councils*** in every school for September of that year. They were to be made up of parents, community members, a student, the principal, a teacher and another school staff member and will be chaired by a parent. "Parents have a right to be involved in the decisions that affect their children's education," said Rae, "and the education system as a whole will benefit from their input. I see this as a positive step towards making our school system more accountable." Primarily, the councils' main responsibilities would be to advise principals on subjects such as curriculum, program priorities, assessment and accountability, student behaviour, and so on. (press release, February 1995)

While these reforms were made specifically to focus control into a more direct line from the Ministry to the teacher, it was also hoped that these changes would do much to bring down expenses.[1]

These reforms made many functions by the school board system obsolete, placing them in an even more precarious position. Frustrated by the superficial cost-cutting measures suggested by the boards themselves, Cooke had begun to make veiled threats of board amalgamations (see March 1994 press release). As soon as the Royal Report was released, he announced that the Ministry would take control of this endemic problem directly. Scheduled for initial meetings in September of that year, a Task Force was set up to look at the reduction of school boards across the province by 40 to 50 per cent, and the limitation of money that boards could spend on administration and trustees' compensation. He expected that new school board boundaries would be in place in time for the 1997 municipal election. "I think we need to look at where our money

[1] For example, it was hoped that by centralizing the curriculum, it would glean about $30 million back from the boards. Downloading certain professional and regulatory functions to the newly developed College of Teachers would also save on Ministry expenses - they were passed along directly to teachers who were charged $90 a year for membership.

is being spent within school boards" he said at the time, noting that Ontario spent more money per student than any other province. "Shared services and co-operation can cut down on the amount of money that's being diverted from the classroom" (Annual Report 1994-95).

While the reforms undertaken by Cooke appeared to have met with popular acclaim by the general public, unfortunately the NDP's performance as a whole did not. Criticised by the media as neophytes in managing the affairs of state and contributing to just more bureaucratic waste, the party was voted out of office in the Summer of 1995. As a result, the Conservatives were returned to power after a 10-year hiatus. The new leader, Mike Harris, attributed the victory to the party's platform dubbed "the Common Sense Revolution" (Gidney, 1999, p. 234). Quite representative of the right-wing backlash sweeping the country at the time,[2] it entailed the elimination of a hefty deficit through massive and immediate cut-backs to government expenditure. At the Ministry of Education and Training, however, this just meant the continuation and expansion of the vision that had been set out earlier that year. Over the next year, the new Minister John Snobelen was able to rapidly pass legislation establishing the Ontario College of Teachers (launched September 16, 1996), comprehensive province-wide student testing,[3] and a Provincial Standard Report Card.[4]

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[2] Harris made many references in speeches (before and after the election) about the successes of the conservative policies of Ralph Kline in Alberta. The Ministry of Education itself used examples from other provinces to justify its cost cutting measures. It stated in a press release "Education reforms similar to those under way in Ontario have already paid off in improved student achievement in other Canadian provinces. As early as 1992, other provinces began to reform their education systems, reducing the number of school boards and increasing provincial responsibility for the fair funding of education. For example: New Brunswick reduced its number of school boards to two - one Anglophone and one Francophone. Eight superintendents are advised by 18 district parent councils. New Brunswick's 16-year-old students ranked ahead of Ontario in national science and math tests. Alberta has reduced the number of boards from 181 to 57, and cut the number of trustees by almost two-thirds. Its students ranked first in the country in national science and math tests last year. British Columbia cut the number of school boards and funds education 95 per cent through provincial grants. Its students ranked second in the country on national tests" (see Putting Students First: Ontario's Plan for Education Reform [Ministry Newsletter for Parents], 9 September 1997).

[3] On March 1997, the Ministry introduced Grade 3 annual province wide testing. It proposed its expansion to grade 6 for October 1998 (see Annual Report 1995-6).

Perhaps the most controversial of the Tories' policies were those related to cost-cutting measures. While the groundwork had already been laid by Cooke's administration, Snobelen decided to accelerate the process. In his first months in office, he announced an immediate downsizing of government programs, projects and positions within the Ministry itself.[5] By March 1996, he was reporting to the legislature his intentions to cut $400 million from the budget (to save an annual 3%). He proposed that the shortfall should not come from additional taxes, but by eliminating certain out-of-classroom expenditures (transportation, board administration, and custodial services). Two reports were cited to buttress his planned cuts to the education system. The first, a study on school costs by OISE researchers, showed that teacher salaries had continually increased while student/teacher ratios continually decreased since 1984 (Lawton, Ryall and Menzies, 1996). Because the education system had found no way of making up for this shortfall from internal sources (through more efficient practices, etc), the result was to drive up education costs disproportionately to other provinces. The second study, on school board taxes, showed that when given an ultimatum by Cooke to make up this shortfall of expenses, close to two-thirds of Ontario school boards chose to raise taxes rather than streamlining operations. Snobelen concluded that

> these reports show that the system is not responsive to the needs of students or taxpayers. ... Our responsibility to the public is to ensure an education system that is both excellent and affordable. ...We must find solutions to fix the education system that will ensure that our children get the quality of education they deserve, but do not burden them with an enormous debt. (press release, 22 August 1996)

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[4] First announced by John Snobelen in a Statement to the Legislature (9 October 1996), the new standard Report Card was experimentally released to 30% of schools in August 1997. It was then to be phased in over a two-year period for full implementation in Fall 1998.

[5] Within their first few months in power, the Conservatives cancelled the early childhood education pilot projects, eliminated the Planning and Implementation Commission (PIC), and the minister without portfolio's office. Frequently mentioned in press releases throughout the year, they stated that they also cut travel expenses, printing, and telecommunication costs within the Ministry. These administrative services were downloaded to other levels, such as the board (see especially the 6 October 1995 press release).

Buoyed by these and other reports indicating nearly $6 billion being spent outside the classroom,[6] Snobelen introduced Bill 104 "the Fewer School Boards Act" in January 1997. In it, the 129 major school boards in Ontario would be cut by half to be replaced with 66 new "District Boards" effective January 1, 1998. Reasoning that taxpayers were simply not getting good value for the money they spend on education (13 January 1997), he contended that this was part of the Tories' master plan to create "less duplication in the education system and more dollars directed to help students learn and teachers teach" (10 January 1997). The act received Royal Assent on April 24, 1997.

Following close upon its heels was another proposal, an Education Quality Improvement Act introduced as Bill 160 in September 1997. Stated by the Ministry itself as the cornerstone of its "comprehensive plan to reform education to ensure the highest student achievement in Canada in the most cost-effective manner," it included a panoply of changes to the Ontario education system. Most specifically it called for the capping of class sizes, increasing teachers' classroom time, extending the school year, allowing non-licensed specialists into the classrooms, and removing the authority to control education tax rates from school boards to make it the sole purview of the provincial government. Boards would then receive funding on a per student basis. Tension immediately rose between the various stakeholders of this plan. Boards called it unconstitutional while the Teachers' Federations called for strike action by October. The media pointed to Snobelen's callousness in dealing with the situation. It was reported that he had instructed his bureaucrats to "invent an education crisis" in order to pass measures that were

[6] Of most specific help were the Sweeney Task Force Report (February 1996), and another internal report released January 10, 1997. Snobelen received a boost at the annual Meeting of the Council of Ministers of Education in October 1996 – He stated that Ontario was doing nothing radical – All provincial governments were engaged in streamlining their educational systems, increasing standards, making the curriculum more rigorous and placing greater emphasis on parental involvement and control. 1985 and 1995. During this time, revenues from property taxes increased 120 per cent while school enrolment increased only 16 per cent.

popularly perceived as mere short-sighted cost-cutting (see Gidney, 1999, p. 236).[7] It was in this milieu of mistrust that the Ministry unveiled its plans for a new curriculum.

The centrepiece of this new education system, planned out in advance by the NDP, had been the Common Curriculum. In it, outcomes were prescribed for teachers to implement, regular comprehensive testing would indicate the schools' effectiveness in reaching these outcomes (aided by professional development from the college), and parents would be able to see the end product of these outcomes in the new standardized report cards. The only dispute that the Conservatives had with this policy, in reality, were the outcomes themselves. Snobelen mentioned repeatedly that parents and teachers found it to be too vague and broad, resulting in an uneven patchwork of local curricula developed at the board level across the province (13 June 1997). Perhaps, the Tories also viewed it as being a little too NDP in philosophy - in a newsletter to parents, the Minister wrote that he felt a "return to the 3 Rs is long overdue" (9 September 1997). Regardless, rather than working within its framework, in November 1996, Snobelen announced that the Ministry would replace the document with a more "rigorous and demanding curriculum that will focus on the basics: reading, writing, spelling and grammar, math, science, geography and Canadian history (22 November 1996). Most important for a smoothly running system, he persistently stated that the new "expectations" would be clearly defined, measurable and grade-specific (13 June 1997). Concurrently, the Harris administration announced that the Ministry would bring the entire system into line by reforming high school in a matching format (including standardized literacy tests and a new "rigorous curriculum" to be implemented in September 1999).

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[7] The hostility towards the Minister's actions is clearly felt in the Ontario Federation of Labour Website. It even contains a subdirectory devoted to an "Embarrass Harris" campaign. The disputes between the educational community and the Conservative government are described by Gidney (1999) in a chapter entitled "Disarray" (pp. 255-275).

Features of the Period:

First announced in June 1997, subject-centred documents were released as follows: Language (June 1997), Mathematics (June 1997), Science and Technology (March 1998), French as a Second Language (June 1998), The Arts (June 1998), Physical Education (June 1998), History and Geography (August 1998). The creators of the documents are largely unnamed and unnumbered in the documents themselves. It would appear, however (in observing the Ministry's website) that the Ministry sought out creation teams for the documents through the MERX electronic bidding system. The few known curriculum co-designers are named in Dimension C.

Analysis of Dimension A: Elements Used During Integration

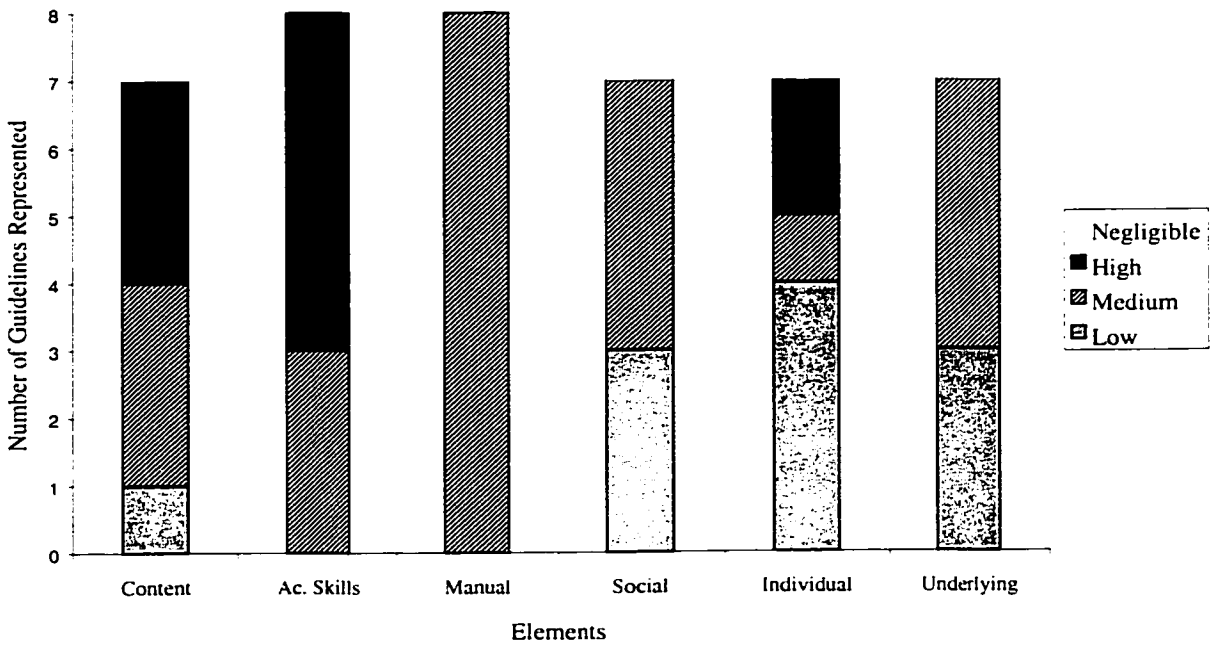
In ***Excellence in Education***, the Ministry explains why reforms had to be made to the existing curriculum:

> These changes aimed for a balance between two roles for education. One is to provide young people with the skills, knowledge, and work habits they need to find or create gainful and satisfying employment and to be independent, productive, and contributing members of our society. The second is to provide an environment where students reach their personal potential, develop general life and coping skills, "learn to learn", build self-esteem, develop interests and integrity, and "become good citizens". Many in Ontario argue that changes to Ontario high schools that began in the 1960s have focused excessively on the second role – being more concerned with "civilizing" the young than with giving them the tools they need to become productive and independent. But education can succeed only if the two roles are balanced (p. 1).

However, unlike its promise, the curriculum pendulum appears to swing to one side, yet again. While social skills and individual development are mentioned, they are far outweighed by the Ministry's concern with preparing students for the "real world". Accent is placed on content and academic skills, and teachers are entreated to show their relevance to the students. While these elements are highly promoted throughout this period, however, little attempt is made to spread

them over the curriculum or to even draw connections between subject areas (exceptions can be seen on 9D-15, 9D-16, 9C-23).

Chart 9.1 - Dimension A (Importance of Elements used during Integration)



Analysis of Dimension B: Integration Methods/Approaches

Fragmented Subjects with Incidental Overlap

When Snobelen unveiled the new "rigorous and challenging curriculum" in June 1997, he stated that it would:

> [spell] out exactly what children should learn in each and every grade—will raise the standard of education for all students in Ontario. From now on, teachers and parents will have a clearer understanding of what children should learn and what they should be able to demonstrate in class and on tests. (p. 1)

For the Ministry at this time, clarity was best achieved through a fragmented curriculum. After a number of "Expectations" were isolated by the curriculum committees, they were then subjugated into fairly focused subject areas: the study of English remains in Language, arithmetic in

Mathematics, citizenship in History, personal development in Physical Education, and so on. It would appear that the prime consideration for this configuration was to achieve clearer accountability and efficiency. A particular expectation was delegated to a particular teacher, whose job was to help the student reach this expectation at a particular time. If the student does not meet this expectation (as shown through testing), it can be easily spotted where the shortcoming occurred. In this paradigm, any wholesale integration of these subject areas would merely lead to confusion and a breakdown of the system (as had happened with the Common Curriculum, Snobelen pointed out).

Curriculum integration does fulfill certain purposes for this program. When natural points of connection incidentally spring up, for instance, the guidelines remark that it would be foolish to ignore them. This is especially important for the internal unity of specific subjects. Math (9A-12, 9A-25, 9A-30, 9A-33) occasionally mentions ways to interweave the various strands (geometry, probability, arithmetic, etc) so that the students can see the ways various techniques can be used in coordination. For English, the individual rules and skills of language must be eventually combined in a logical order to instill a systematic approach (9B-4, 9B-11, 9B-28). These reasons are mentioned as well in Physical Education and the Arts. Lastly, the Science curriculum points out from time to time occasionally that it must be seen as an amalgam of both science and technology, the two being interrelated (9D-1, 9D-4, 9D-7). External integration (between subject areas) is mentioned in most guidelines, as well, but its uses are considerably more limited (see figure 9.2, p. 613). It is implied that this type of interconnection is considered a luxury to be undertaken by teachers only after they have mastered the prescribed subject at hand. Otherwise, it is feared that they may stumble into areas that they are less familiar with and muddy the waters. With this belief the Snobelen Ministry is not dissimilar to that of period 4 in the early 1960s.

Students' Interests a Consideration

While each guideline states quite explicitly that it is important for teachers to recognize students' interests, this cannot be seen as any return on the part of the Ministry towards child-centred education. In this instance, teachers are being encouraged to find teaching approaches that will interest students enough to motivate them to reach the prescribed expectations. This may include the use of simpler, more meaningful language to the students (9A-26), engaging in activities that are within the scope of the students' development (9B-4, 9B-11, 9B-12, 9D-15), giving them a choice of reading material (9B-7), and increasing teacher enthusiasm for the subject at hand (9C-10, 9F-18).

"Rigorous" Social Continuity

Snobelen repeatedly stated to parents that the new "rigorous curriculum" was part of Ontario's "back-to-basics" movement, aimed at integrating certain traditional skills (namely the 3Rs) back into the Ontario students' education. As well, students should be exposed to various work and civic situations to prepare them for their role in society. While extolled vociferously by the Minister in several speeches, however, this aspect is mentioned less frequently throughout the curriculum. It may be inferred that the creators of the guidelines wished to avoid any direct promotion of "traditional values" for fear of being branded reactionary.

Change not an Issue

The creators may also have been nervous about being called socially radical by the public. They felt this had greatly contributed to the destruction of the "rigorous" curriculum's predecessor, the Common Curriculum. The only hint of change mentioned in the documents revolves around scientific discovery, economic shifts, and vague references to social issues such as multiculturalism and environmentalism.

Analysis of Dimension C: Loci of Integration

In this period, the balance of power has once again been radically shifted back along the traditional Ministry-teacher axis. The creation and distribution of the curriculum, itself, reflects the changes that had taken place. Rather than seconding a number of board members and stakeholders from the internal system to help create the documents, the Conservatives posted invitations to bid. Contracts were then given to those who were specialists in the field and could perform the job most efficiently. In Science, for example, the guidelines were developed in collaboration with a Science Education Group at York University, based on a Pan-Canadian science framework released the year before by the Canadian Council of Ministers of Education. The document was then distributed to 300 teachers in 17 school boards across the province for field-testing. Once completed, each document was sent directly to teachers for implementation, bypassing the standard operating procedure of re-interpretation by school boards. In fact, the Ministry no longer saw the boards as having any viable role to play in terms of curriculum matters, and severely cut their budget earmarked for this area.

The curriculum duties of principals were also severely curtailed (if the curriculum documents are any indication). Rather than leaders, they are seen more as custodial agents, making certain that the built environment functioned properly to serve teachers needs, properly scheduling time-tables, juggling resources and so forth. As well, teachers' committees within the school are never mentioned. Once again, the teacher is looked upon as a combination of lone professional and operating core. While it is the responsibility of the workers of this level to transmit the prescribed expectations to the students, they are also given the discretionary powers to use the instructional methods that they deem the best to suit the situation. Professional development, given by the new Ontario College of Teachers, was thought to eventually relate new teaching techniques to teachers and help them be more effective in dealing with the curriculum. It is highly recommended, however, that they try experiments and indulge in

integrative activities only after the solid core of material has been successfully relayed to the students. Success, in this case, is determined by satisfactory results in exams set by the Ministry and by parent approval.

Analysis of Dimension D: The Relationship of Grades 7-8 to Other Grade Levels

The new Conservative Ministry of Education and Training eliminated virtually all changes that had been made to the grade system during the previous era. Unlike the Common Curriculum, the new "rigorous curriculum" deals solely with the traditional elementary years of grades 1 to 8. Grade 9 is placed back into the secondary niche and restreamed into various aptitudes (i.e., college or work-bound). Furthermore, while general comment is made in regards to the overall education of all elementary students, most expectations are attached to specific grade levels. This is in stark contrast to the previous policy of allowing outcomes to be taught over extended blocks of time (Grades 1 to 3, 4 to 6, and 7 to 9). While it greatly reduces flexibility about what can be taught, both Snobelen and his successor Johnson assured the public that it would do much to increase clarity and accountability. By making it more efficient, they added, the curriculum designers were able to add materials that were previously taught in higher grade levels.[8]

[8] A press release informed the public that "In addition, this new curriculum addresses Earth and Space science - components which were missing from the previous curriculum. In the new curriculum, students will cover many study units earlier than in the past. For example, "Particle Theory," which was previously taught in Grade 9, will now be taught in Grade 7. Magnetism and electricity, which used to be taught in Grade 10, will now be taught in grade 6" (26 August 1998).

Analysis of Dimension E: Integration Methods/Approaches

Primary Forms of Integration

The one strong form of integration present in this curriculum is the ***Nested Approach.*** While differing in content and skills, each guideline displays a uniformity of design. Set out in a lock-step manner, each proceeds sequentially through its specific subject area – from the known to the unknown, from the simple to the more complex. While various strands of related material or skills are described separately (for the sake of clarity), the teacher is beseeched to twist them together for meaning.

Beyond this point of internal integration, however, the remaining forms tend to be rather scattered and unfocused as to the definite benefits they may yield. ***Harmonization*** is placed in the primary section only because of the insertion of "computer skills" in every document. This is the only unified initiative that the Conservative government seemed to support (reinforced with millions of dollars in grants to schools designated for computer networks).

Localized Forms of Integration

While the ***Cross-disciplinary*** and ***Correlation Approaches*** are mentioned occasionally, it is quite obvious that the Ministry views them as double-edged swords. They may give added insight to the student who sees the relationship between the subjects. However, they may just as easily draw them away from the task at hand and waste valuable class time on something that has limited relevance. As such, it is implied that these forms of external integration should be indulged only when the expectations are assured. Even the ***thematic approach***, reaching a pinnacle in the previous period, has now greatly diminished in stature, now defended primarily by the Sciences, Social Sciences and Arts. However, even in these subject areas, teachers are strongly cautioned to handle the integrated unit delicately and with great planning beforehand.

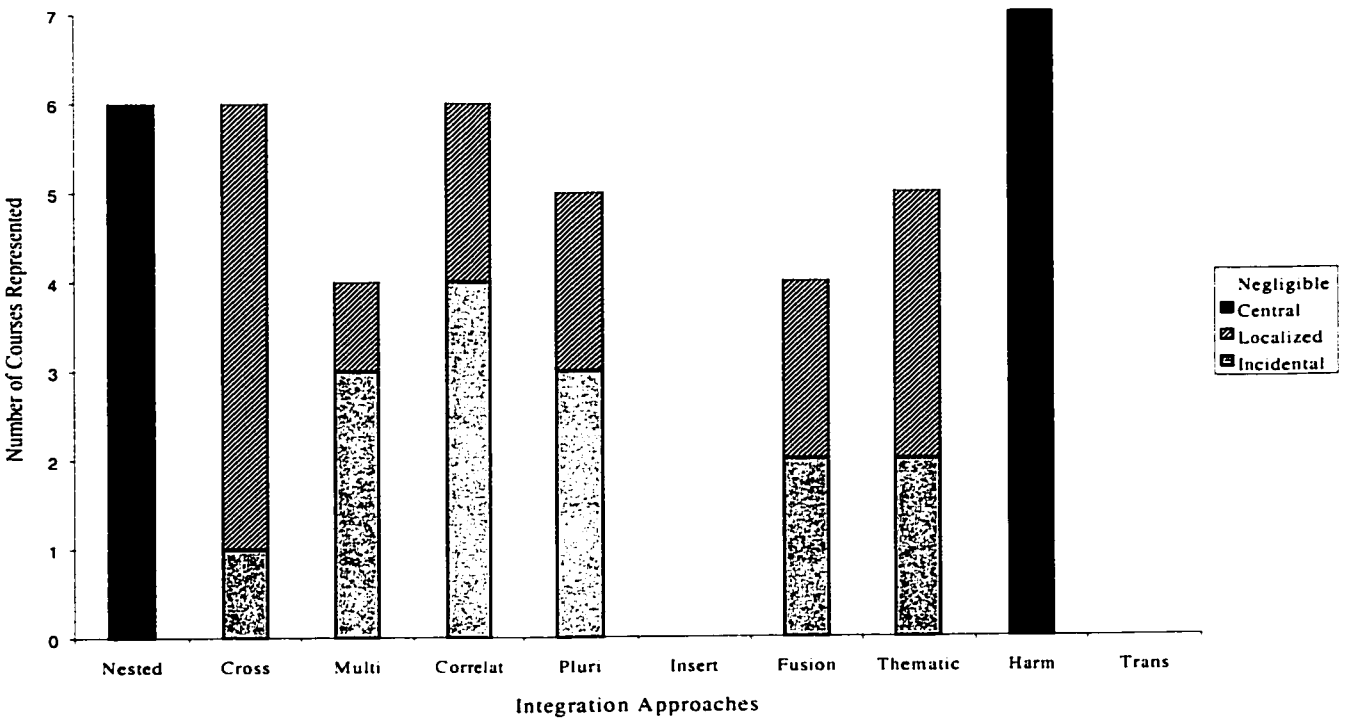
Individual cases do arise, however. Science and technology are fused together to form two halves of one comprehensive course, while Art, Dance, Music and Drama are all brought

under the umbrella course entitled "The Arts". In both instances, however, the subcomponents are dealt with in self-contained sections in the document, with little merging or overlap. As such, it is unclear whether the form of integration promoted by the documents is actuality ***Fusion*** (in that the separate components merge to create a new entity) or ***Pluridisciplinary*** (in that the components remain as separate sections but have natural affinities for one another – i.e. through departments). If the perspectives expressed by teachers in Part II of this study give any indication, it is suspected that Science falls under the former, while The Arts falls under the latter.

Incidental Forms of Integration

On the rare occasion, the documents hint that teachers may wish to collaborate when preparing their course work. Because the expectations are stated in such a specific manner, this represents more of a spot check process than the massive amount of ***multidisciplinary*** activities demanded of the previous period. Again, this seems to have been done to cut down on the waste of teacher time and energy expended on group consensus.

Graph 9.2 - Dimension E (Integration Methods/Approachs)



Analysis of Dimensions F & G: Implementing Curriculum Integration

With accountability and efficiency as guiding principles, the Ministry appears to place a Weberian model over the education system. Primarily, it takes a stronger regulatory hand in controlling the implementation of the new curriculum. This entails the imposition of uniformity across the entire organization through a single province-wide program and the elimination of any hindrances or barriers to the clear interpretation of the guidelines' expectations. Boards, which have been able to act as independent fiefdoms with the ability to reinterpret the curriculum and allocate privately raised funds, are greatly stripped of their power during this period.[9] In return, the structure is redesigned to reflect a more streamlined, direct hierarchy of authority. The documents themselves do much to give a distinct division of responsibilities for each stakeholder. Each subject teacher is directly given a certain amount of "clearly-defined expectations" which are to be followed and applied rather than adapted to the situation. Even students are given a prescribed amount of responsibilities (such as a commitment to learn). To ensure that the prescribed expectations are achieved with the greatest efficacy, organizations are created by the Ministry to deal with professional development (the College of Teachers) and evaluation (the EQAO). Harris explicitly endorsed the changes to education: "testing will let us know if the education system is providing the consistency and quality we want everywhere in the province" (1 October 1998). While this does lead to a seemingly greater accountability of the curriculum, it does little to aid curriculum integration, however. By slotting everything to be taught into a certain time, and delegating it to a certain individual, little freedom can be given for any cross-over activities or sharing of work (invariably increasing balkanization and subject attachment).

Because the Harris administration takes a very mechanistic view of implementation, it tends to ignore most human-related problems associated with the process. In speeches made to

[9] This includes a multitude of decision-making powers, such as student accommodation, class sizes, direct funding per student (1 January 1999).

the public, Dave Johnson explained that the new curriculum consisted of the most rigorous guidelines issued in the past 25 years. He also stated that a great amount of material previously taught in senior years would be brought down to the elementary level. However, no mention is made of this fact in the documents themselves, and no help is given to teachers on how to cope with the influx. As well, while most sections of the new curriculum were issued only in the summer or fall of 1998, the Ministry instructed teachers to immediately abandon the Common Curriculum and follow the new expectations (full implementation to be completed in a three-year period). No thought is really given to the effect that a new curriculum might have on their performance or psyche.

The stakeholders who seem to be given the greatest consideration by the Ministry during this period are the parents. In fact, every measure undertaken by the central authority is said to be a result of parental concern or a desire for more parental involvement. Johnson emphatically stated that:

> Parents have told us that they need standards and consistency to improve the quality of education. That's why we've instituted a standardized curriculum, with clear expectations for student achievement, and put a limit on average class sizes (press release, 9 January 1998)

In this new relationship, however, it is quite clear what role the parents will now play. When discussing the newly-created Parental Advisory Committee (mandatory at each school), or the updated standardized Report Card, the Ministry hopes that parents will play the position of watchdog. Informally they will now be able to assess how well their children are doing as compared to the school, provincial and international average and relay their feedback directly to principals, and the Ministry.

Overall Remarks on Period 9

Based on the actions taken by the Ministry during this period, certain inferences can be made:

1. Paradigm Shift

Paramount to all other desires, the newly installed Conservative Party wanted to show to the public an education system that was giving them "good value for money." This was not to say that the previous administrations were giving poor value – there were just no standardized mechanisms to indicate one way or another. Since Davis' time, there had been a deep-rooted trust that teachers knew the best way to educate students depending on certain locations. For this reason, any standardized techniques concerning curriculum or evaluation had been a taboo subject. In this present period, however, there is a clear loss of this trust, replaced by a desire to see (in empirical terms) if the system was actually working efficiently and effectively. This represents, therefore, a complete paradigm shift from a humanist to a mechanistic model of administration.

2. Division of Responsibility

Having made the jump from service agency back to regulatory body, the Ministry saw itself as being responsible for selecting the desired expectations that students were to reach. It then slotted these expectations into traditional subject areas and distributed them to the teachers. Other stakeholders (like the boards and principals) may concern themselves with resources and plant, but curriculum becomes the sole responsibility of the operating core (the teachers). In fact, the Ministry discourages forms of team teaching, sharing or mixing of expectations between courses, feeling that this would make it more difficult to pinpoint the exact places where individual students have weaknesses. For the same reason, the guidelines are organized in a rigid format, grade-by-grade. Formal standardized exams, seen for the first time in this study, are implemented to make certain that these expectations are met.

3. Drive for Accountability Chokes Curriculum Integration

In this instance, the Conservatives' all-encompassing drive to insure that certain expectations are transmitted to the student has led to an extremely fragmented curriculum, with little hope of integration beyond the internal, nested approach. In fact, the concept of integration does not really fall into this Ministry's sphere of interest – because this type of learning is so complex and intangible, it would simply be counter-productive to attempt. Johnson pointed out that this fact had been proven by the experiment of the Common Curriculum. The Ministry may endure seasoned veterans to pursue this teaching method if they wish, but sees it as an optional, experimental luxury rather than any sort of basis for education.

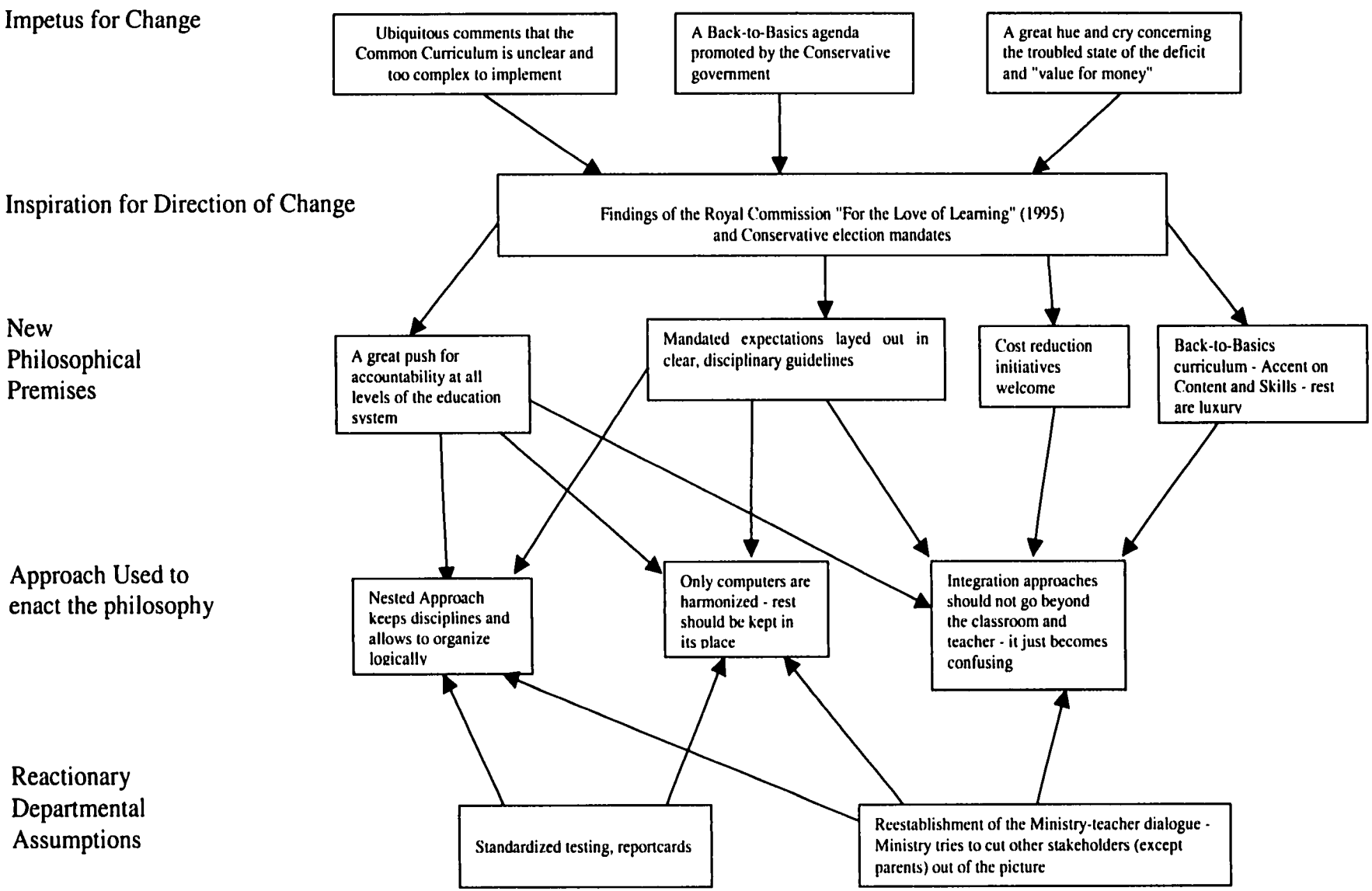


Diagram 9. Linking Philosophy to Curriculum Integration Approach

Comparison of Ministry Perspectives

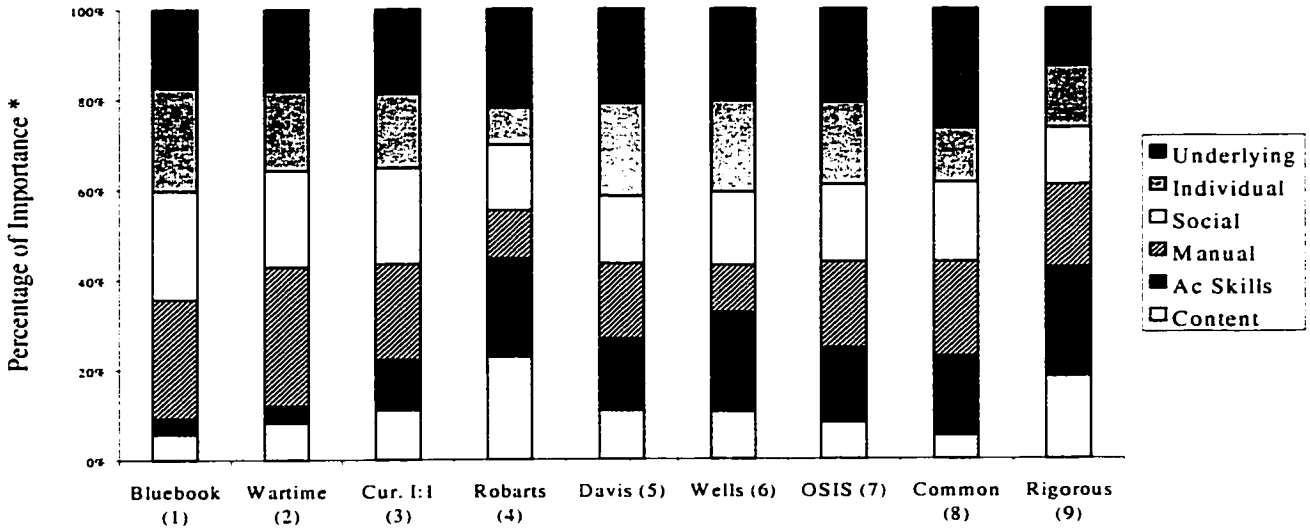
Introduction

The initial questions that propelled Part I of this thesis bear repeating: "What has curriculum integration meant to the Ontario Ministry of Education from 1937 to the present? How has this conception varied over time? What factors explain such changes?" This study has found that for the past 60 years, curriculum integration appears to have remained a nebulous approach for the Ministry. In fact, except for period 8, no operational definition has existed for the term within the curriculum documents. Even the forms recommended or mandated from the central authority varied greatly from period to period. With no sustained vision of what the term is or what it can do, it is little wonder that succeeding administrations have only used it in a tentative fashion. What can be determined from the present study, however, is that the form (Dimension E) chosen during a particular period depended greatly on the Ministry's perception of the benefits of integration (Dimension B), what elements it employed (Dimension A), and the set-up of the educational system of the time (Dimensions C and D).

Dimension A – Elements used during the Curriculum Process

As represented below in figure 10.1, some elements have varied greatly while others have remained relatively stable in importance. These shifts are described in more detail between pages 256-263 and in Appendix C.

Figure 10.1 - Dimension A (Numerical Aggregation of Overall Importance of Elements)

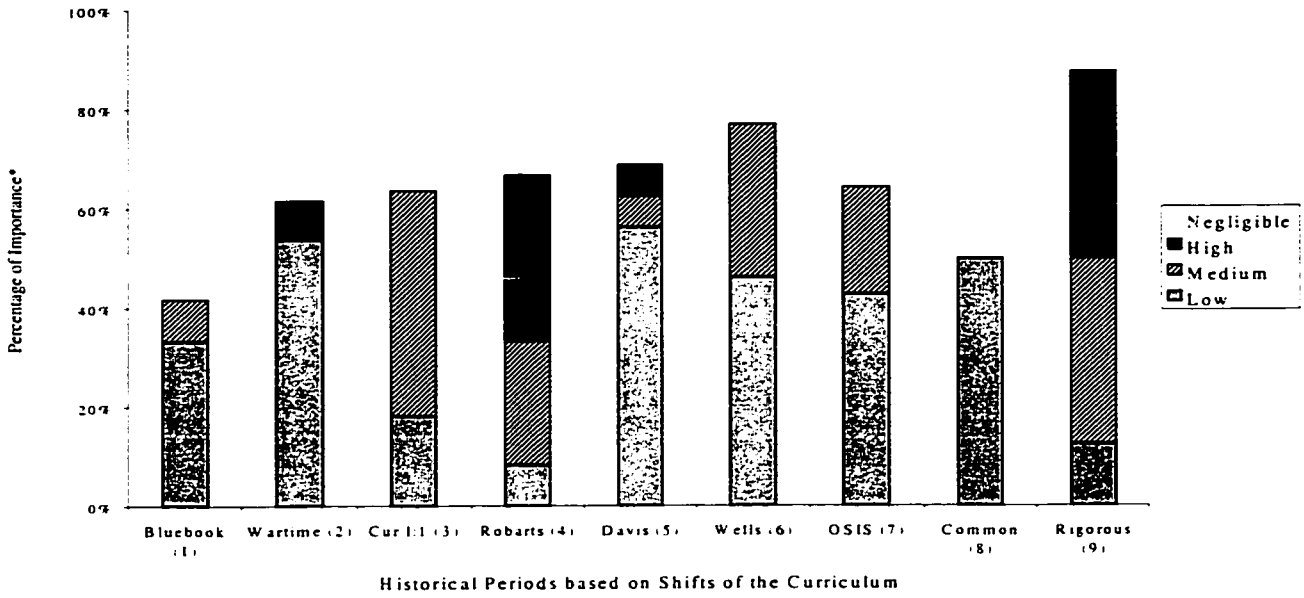


*percentage is based upon the numerical assignment of importance displayed in charts 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1, and 9.1 (Negligible = 0, Low = 1, Medium = 2; High = 3).

Content

The use of content is in a perpetually fluid state throughout the documents. For most periods, there is a fear that too much information will only confuse the student, clog the mind, and get in the way of the larger perspective. At one extreme are periods 1 and 8, which virtually shun content altogether. Other, more moderate periods feel that there should be a place for content but that it should be tightly reigned in by some method (like the thematic) so that they may contribute to a larger meaning. In ascending degrees of usage, this can be seen in periods 2, 5, 7, 6 and 3. At the other end of the spectrum, in times of great stress (periods 4 and 9), are the periods that include a great deal of content – perhaps in order to show the public that students are learning something *concrete*. It is interesting to note that these periods also show the lowest amount of interdisciplinary activity (see Dimension E on pp. 269-278).

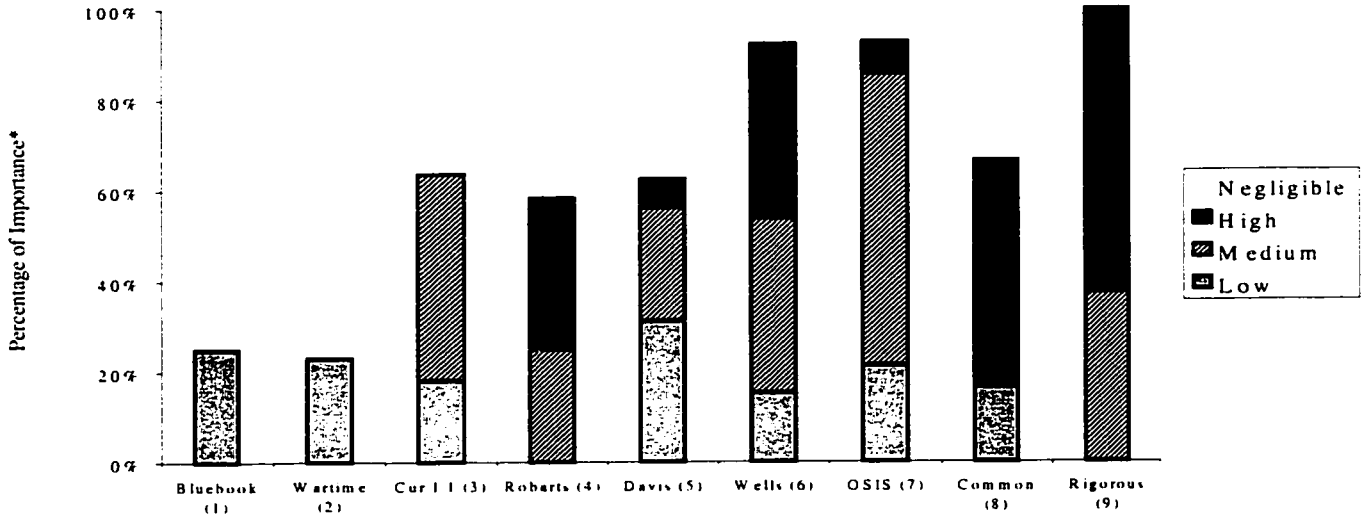
Figure 10.2 - Comparison of the Importance of Content between Periods



*Percentages in figures 10.2 to 10.7 are based on conversion from the numerical assignment displayed in charts 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1 and 9.1.

Academic Skills

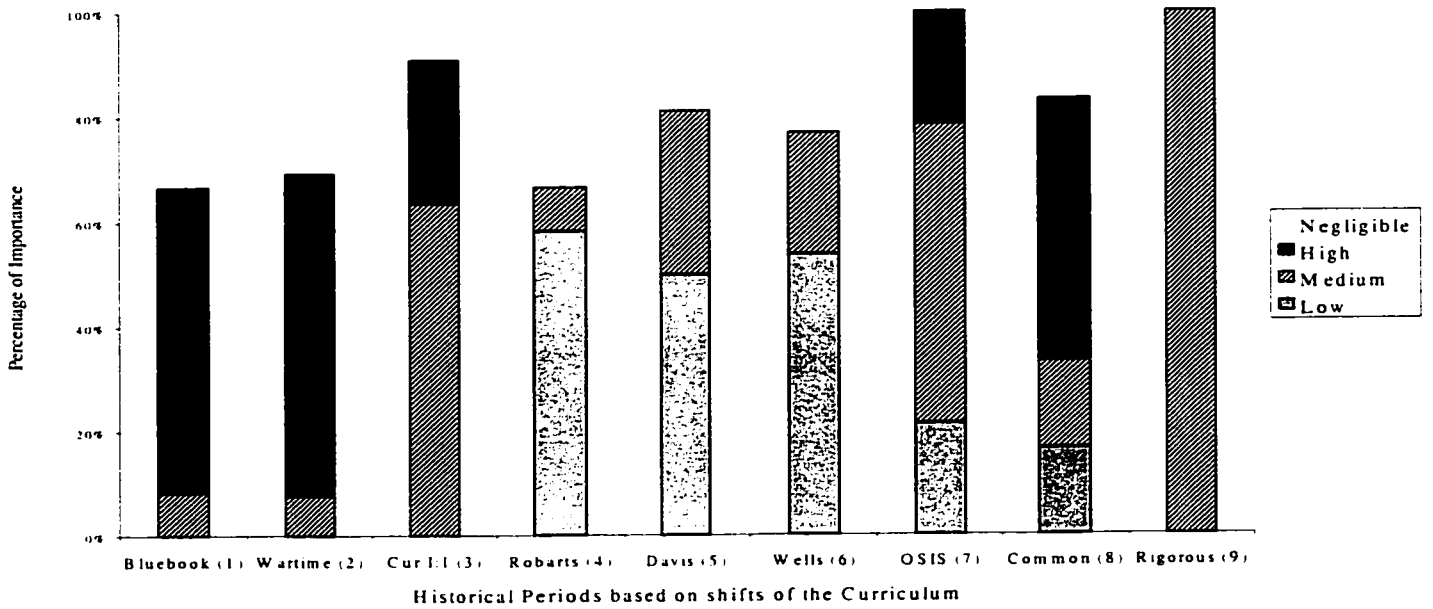
Figure 10.3 - Comparison of the Importance of Academic Skills between Periods



Academic Skills have continually grown over the years to become the paramount element to be integrated into the Ontario curriculum. For the first two periods, little accent was placed on any but the most fundamental of skills. This may be due to the fact that most students were expected to leave school at grade 10 or lower to take up a job requiring no more than basic literacy or mathematical aptitude. While both periods 3 and 5 gave more credence to skills (and broadened their definition to be more than the basics), they also kept them segregated in separate subjects. It is only over periods 6, 7 and 8, that a truly interdisciplinary approach is seen. In period 6, an Across-the-Curriculum method is suggested. In period 7, it is mandated. By period 8, it is so interconnected that one can barely distinguish where one skill stops within the document and another begins. The two integrative standouts are periods 4 and 9. While both give a renewed prominence to the "basic" scientific and mathematical skills, they also segregate them into assigned niches – most likely for accountability.

Manual Skills

Figure 10.4 - Comparison of Importance of Manual Skills between Periods



While being important in both the earlier and later periods of this study, Manual/Practical Skills undergoes a radical transformation. For the first three periods, a hands-on approach is recommended. This is based on the belief that concrete work is a steppingstone to more abstract thought processes during adolescence. By period three, however, this conviction is replaced by a desire to show the students the relevance of education through the use of practical problem solving. By periods 4, 5 and 6, both approaches lose much of their significance, to be banished to guidance and scientific lab work. When this element is reborn in periods 7 and 8, it has metamorphosed into generic "Life Skills" or the ability to manage personal affairs, to be adaptable, and to be self-reliant in society. Therefore, while the desire of the Ministry to prepare students for the "real world" has stayed fairly constant over the periods, what has changed is its perception of "survival". In the 1930s, hands-on training was quite important. However, as mankind has moved further away from this aspect of the human situation, so to has the Ministry's definition of what is "practical." By period 9, this aspect has begun to change again – from a more universal worldview to practical applications in the students' immediate environment.

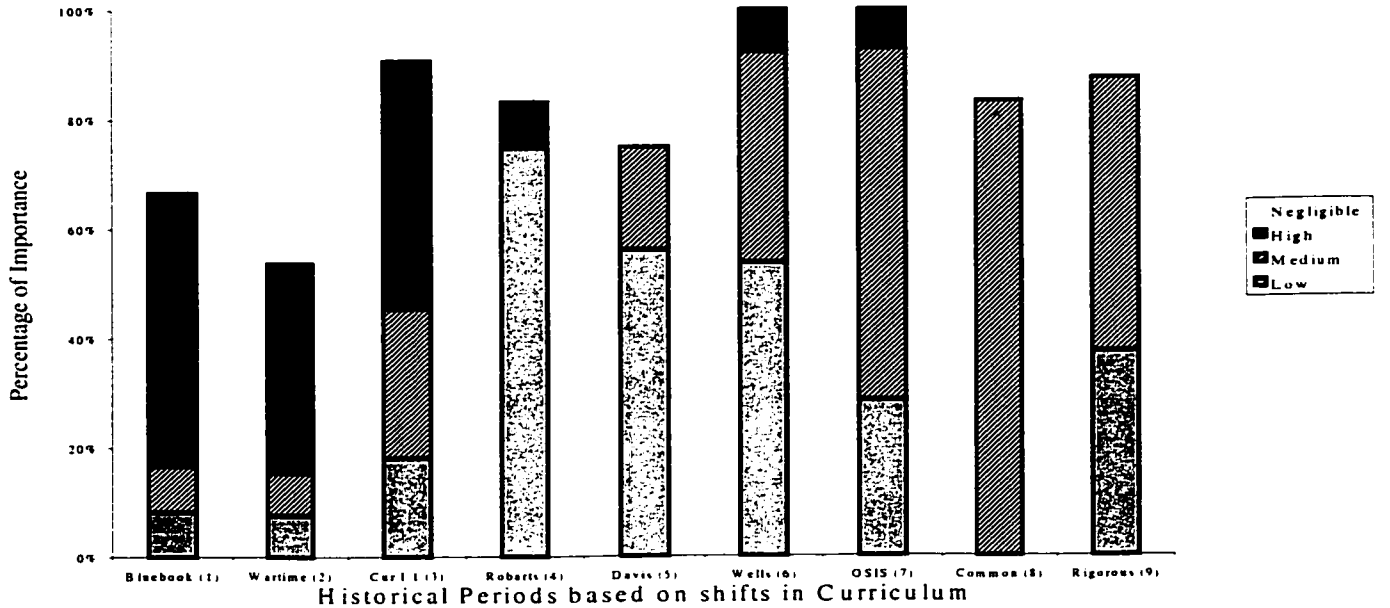
Social Skills

During the first three periods, Social Skills was seemingly unquestioned as a part of the school's mandate. Seen especially in period 2's Enterprise Method, students were to be socialized through active participation in projects and team activities. In light of the events of the 1930s and 1940s, it was not surprising that this element was highly promoted - social skills were believed to be the bastion between a dictatorship and a democracy. By period 3, however, the active element of group work was being downplayed by the curriculum, to be replaced by a more passive approach of teacher-led activities. From this point on, this element appears to have been fighting an uphill battle. For a fifteen year hiatus (periods 4 and 5), the social aspect is barely mentioned, perhaps because the skill was viewed by the Department as too vague to be used, or

perhaps because it no longer thought it was the school's place to inculcate this skill. Nevertheless, social skills became relegated solely to guidance at this time.

When the Ministry brings this element back into the curriculum, it does so cautiously. Citizenship training is pockmarked through the guidelines and some controlled group work is allowed in period 6. However, great amounts of student-led group activities are allowed only in the traditionally social subjects of Physical Education, Guidance and Drama. After this trial period, group work is reborn as an entrenched mainstay of a well-rounded education through periods 7 and 8. Collaboration is promoted to the extreme – students were actively taught to be team players and functioning members of society. Beginning in the mid-1990s, however, group work was viewed by the Ministry as an unproven technique that could lead to a great waste of time. For this reason, Period 9 appears to draw back from this approach. While it agrees that students should learn cooperative skills and citizenship training, it concludes that these need not be necessarily learned through active participation.

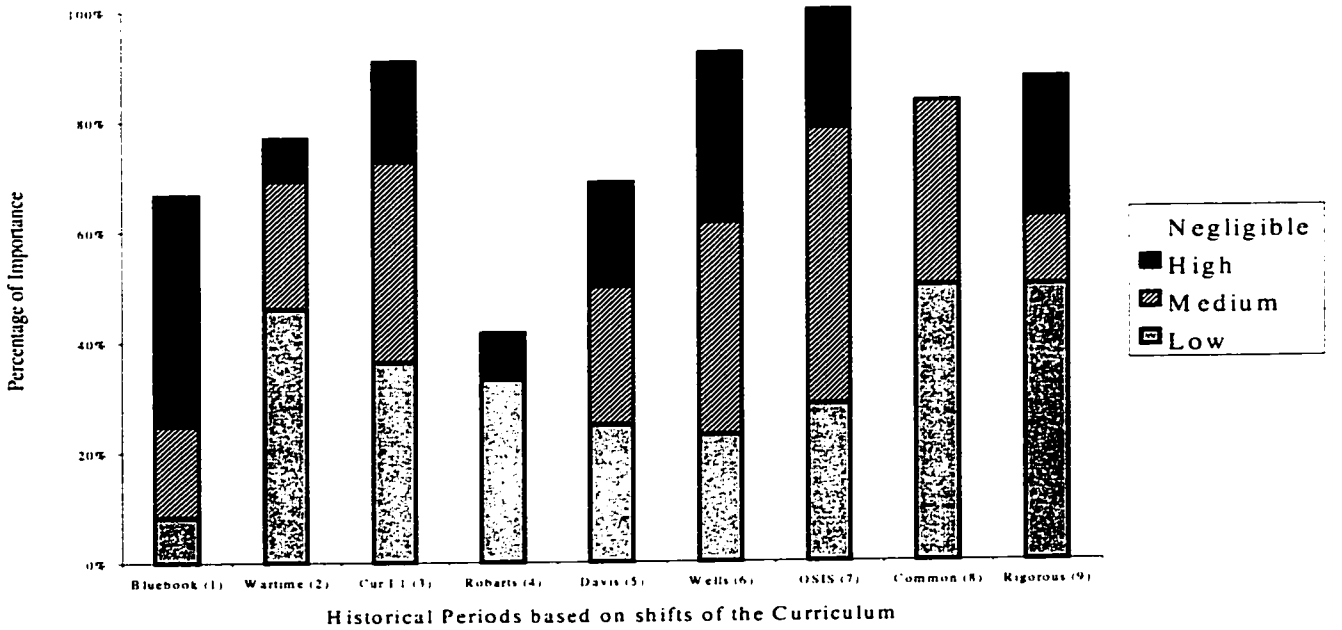
Figure 10.5 - Comparison of the Importance of Social Skills between Periods



Individual Development

There have been three distinct views of student development over the 60 years of this study. The first perspective observes each student as a distinct entity who should deserve an individualized education. This permeates periods 1 and 5, both extremely ideologically charged with the progressive spirit.[1] The second and more widespread grouping consists of the periods that viewed the responsibility of the teacher as meeting generic adolescent needs. Here, individual development becomes almost quantifiable and thrown into a specialized course (most likely guidance as in period 3) or split among various courses depending on the personal attributes. For instance, English is assigned the stimulation of imagination and self-confidence, while Art's function is to develop aesthetics, and Physical Education teaches good health habits. This can be seen in periods 2, 6, 7 and 8. The last group is made up of those who believe that it is really not

Figure 10.6 - Comparison of Importance of Individual Development between Periods



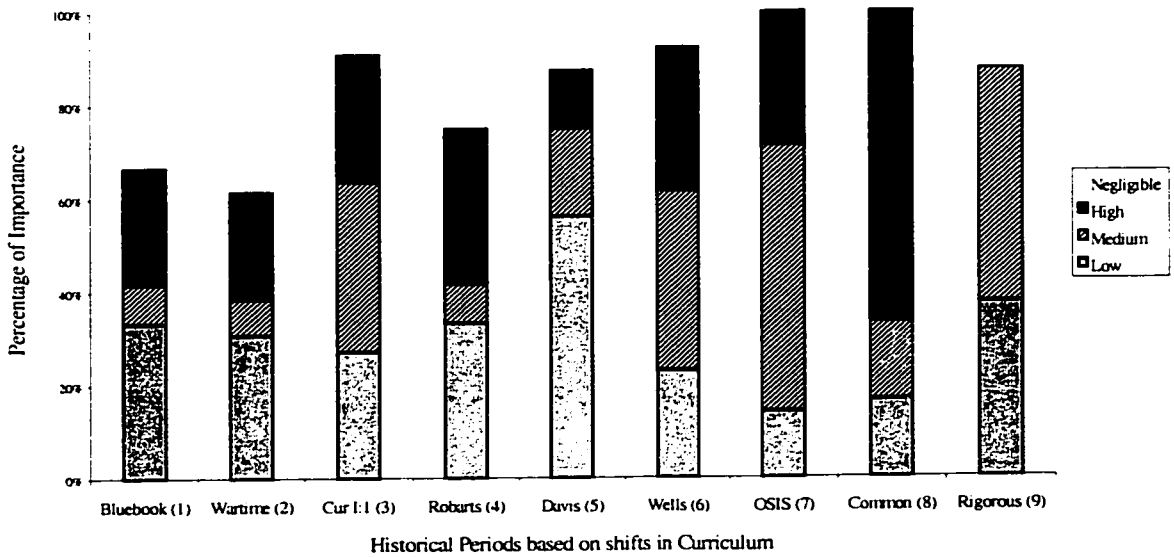
[1] Period 5 is perhaps the most authentic. Period 1 mentions most of this in the preamble without concretely realizing it throughout the programme.

the responsibility of the school to include any but the barest hints of this element. Period 4 ignores this element altogether, while period 9 includes a sincere effort only in Arts and Physical Education guidelines. Otherwise, it seems to indicate that this aspect of education should be left to the student's parents to attend.

Underlying Principles

Each period appears to have had one or two strong underlying beliefs that the Ministry wished to see transmitted to the student. In the earlier years of this century, these principles revolved around patriotism, good citizenship and religion - in later years the Ministry seemed to lean more towards environmentalism and multiculturalism. While these principles do change greatly over the years, a pattern forms as to how they are integrated into the curriculum. In general, if the value is vague, it is usually spread liberally across the curriculum in the form of suggestions. This can be seen in the case of patriotism and religion (period 1) and multiculturalism (periods 5 and 6). As the value comes into sharper focus, it becomes relegated to one or two separate courses. This can be observed in the cases of religious instruction (seen in

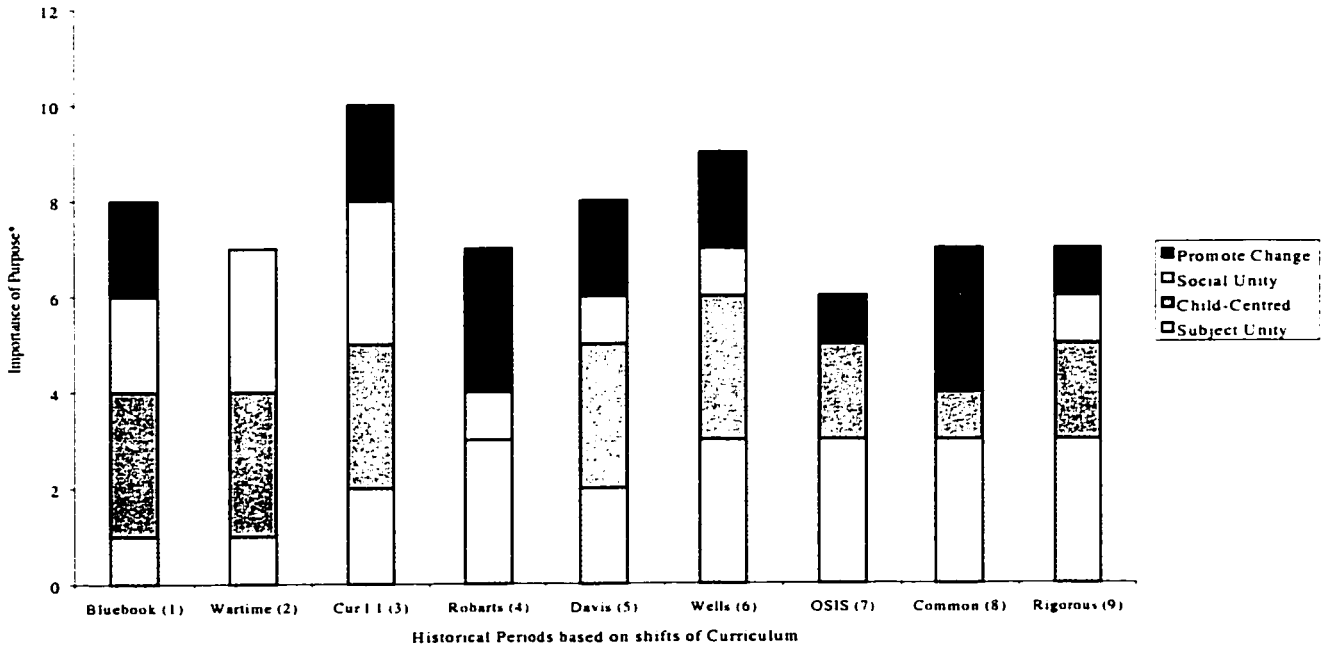
10.7 - Comparison of Importance of Underlying Principles between Periods



period 2) and conservation (seen in periods 3, 4, 5). Finally, if the value remains clear-cut and deemed a central issue to be studied, it becomes more strongly integrated across the curriculum. During the OSIS period, for example, the Ministry mandates the inculcation of environmentalism and multiculturalism in all areas of the curriculum through the use of specific sections of each guideline. In the Common Curriculum (Period 8), these two tenets are even more thoroughly woven into the fabric of the document. What is interesting to note, is that as the beliefs remain sharply focused, but drop in importance in period 9, both are reassigned back to separate disciplines (environmentalism to Geography and Science, multiculturalism to History and the Arts).

Dimension B – What is the Objective or Purpose of Integration?

Figure 10.8 - Dimension B (Relative Importance of Objectives of Integration)



*Importance is based upon the numerical assignment of importance displayed in figures 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1, and 9.1 in Appendix - (Negligible = 0, Low = 1, Medium = 2; High = 3). The highest number 12 represents the potential of all 4 purposes being ranked as High.

Subject Unity a fairly Constant Objective

This objective of integration has held firmer than any other dimension for most of this century. Continuous throughout every period (even the periods blatantly negative towards the approach such as 1 and 2) there is an acknowledgement that curriculum integration is an appropriate method to reduce overlap, fruitless repetition, and timetabling complexity. As well, all periods except 4 and 9 agree that integration is crucial to allow students to see that the subject areas can combine into a meaningful whole, thereby overcoming fragmented thinking. Most of the earlier periods, in fact, believed in the existence of a *natural unity* within the curriculum and that natural points of contact must be sought out and exploited for their benefits (seen especially in period 1, 2, 3, 5). Period 5 is the most adamant in feeling that these connections must be unforced. The last two periods are of great dichotomous interest – while in period 8, integration is seen as one of the most important aims of education (anticipating the eventual destruction of the subject-based system altogether), period 9 sees integration as a luxury with limited benefits for clarifying the curriculum or efficiency. In fact, it sees integration as doing a great deal of harm to accountability. Periods 6 and 7 take the most moderate approach with the belief that connections should be found first within subject areas (bodies of knowledge) for internal consistency and should branch out from there.

Student-Centred Reasoning Varies Greatly

While the previous objective was based on the practical benefits that could be derived from curriculum integration, a student-centred approach is based solely on faith. Perhaps this is why it has varied so greatly over the years. The activities recommended in Period 1 and 2, borrowed from the progressive movement, revolve around the "innate wisdom" of the child. Here the Department believed that teachers must actively interest and engage students, and that curriculum has to be adaptable to student's natural bent and abilities. Throughout the 1950s (period 3) a fear arose about the ineffectiveness of the previous two periods, which cast this tenet

into doubt. While this approach continued to be promoted, more passive student activities were recommended. By period 4, with the launch of Sputnik, the Department appears to have seen this as confirmation that student-centred integration didn't work and tore out almost every shred of progressive thought. During the late 1960s (period 5) a reversal occurred again, based on a change in educational scholarship, and brought back the belief in student-centred education. Teachers were entreated to create programs to attend to students' needs and interests, giving them a greater role in planning the course. This radical approach did not last long. Period 6 and 7 saw a retrenchment from individualized education to the meeting of the more uniform adolescent level of needs. Active participation on the part of the student now became lost in the final two periods. While radically different in outlooks, both periods 8 and 9 are dedicated to teaching the student a certain number of outcomes or expectations – as such, the child's interests becomes subsumed to the greater cause.

Social Continuity and Old-Fashioned Notion

This is seen only before, during and immediately after World War II – perhaps because of the great threat posed on Ontario's whole way of life during this time. For the last 40 years this objective has played very little part in the integration process. This may be due to the fact that after normalcy had returned during the 1950s, progress and change become the prevalent views of the Department. And perhaps the central authority did not wish to inculcate any set social values into students. Even the newest guidelines, revolving around a "back to basics" platform have only the barest whiff of social continuity.

Promotion of Change tied to Political Agendas

Two very different aspects of change are referred to during this study. Between periods 3 and 7 there is a determined belief that change is a constant fact of life and should be integrated into the students' curriculum. Beginning quietly after the war (period 3), it grows during period 4 to look at the scientific and technological revolution that was engulfing the western world. This

changes in the next three periods to include multiculturalism, globalism, and so on. However, except for period 8, these remain as secondary issues.

A second conviction for change binds together two distinct eras. Periods 1 and 8 both share a radical belief that education should be striving to bring all aspects of the curriculum into a united whole. As such, they recommend the destruction of the subject-based system and anything else seen as barriers to the unifying process. Interestingly enough, each of these periods is followed by a deadening silence on the matter (see Periods 2 and 9).

Dimension C – Who is Involved in the Integration Process?

For most of this century, the curriculum documents have maintained a dialogue between the Ministry and the teacher. However, a number of outside intercessors have increasingly intervened to place their own stamp on the conversation. This has been a gradual process. Initially, as most schools were very small and school boards non-existent in relation to curriculum affairs, the procedure was simple. The curriculum was created by a very small band of scholars within the Department, basing their conclusions on British theory, and distributing the programme to teachers for them to follow and adapt at the classroom level. Period 3 represents the most radical departure seen in this study, in that it opened up curriculum development to a much wider audience of teacher groups. While it appears to be somewhat unsuccessful, exemplified by the backlash of period 4,[2] the philosophy of decentralization returns in period 5 and many new stakeholder groups were included in the creation of the curriculum. By this time, the Department plays a smaller role in curriculum and the post of inspector is eliminated. A newfound trust seems to be placed on the teachers in curriculum matters.

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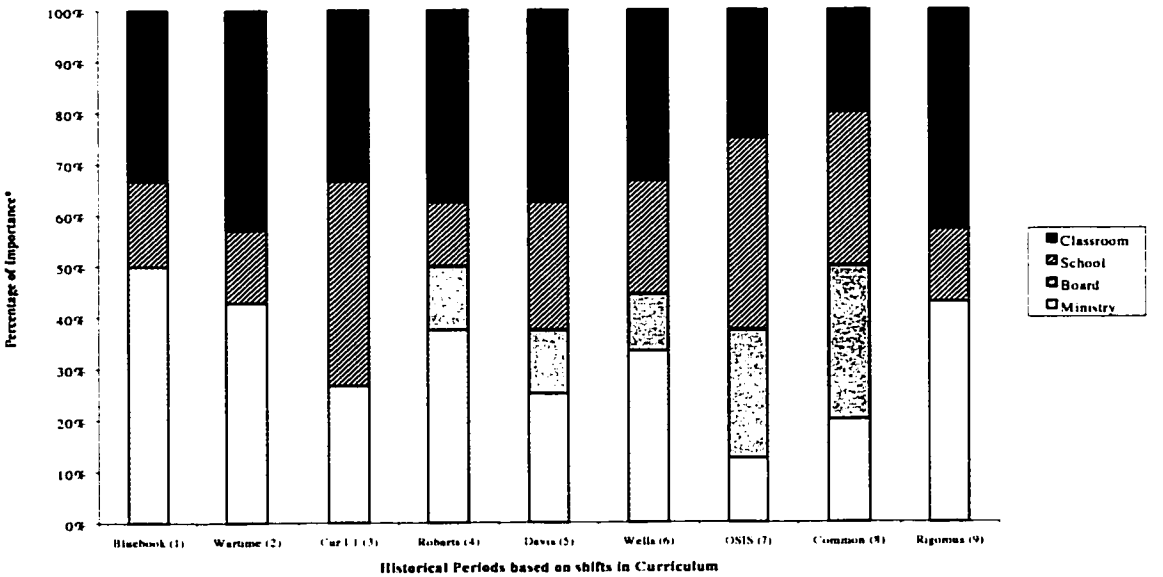
[2] Nevertheless it did encourage the field-testing of documents for the first time.

Periods 6, 7 and 8 see a mushrooming of middle agencies' involvement in the curriculum process. For each period, large numbers of stakeholders are seconded to draft, revise, and validate each document and given to the school boards for distribution. By period 8, they have the right to create many support documents, adaptations, and additional expectations to suite the local situation. At the same time, school committees are expected to play an important role for integrative possibilities. Teachers cease to become lone scholars and are expected to be team players (perhaps to allow some informal evaluation of teachers' performance without being monolithic). By period 8, this creates a definite strain on the Ministry's control of the curriculum process. The cacophony of voices does much to hamper distribution and "water down" the impact of the original curriculum documents. By period 9, the Harris government pushes the pendulum back to a facsimile of period 2. Once again, curriculum is carried out on a Ministry-teachers axis. A minimal group quickly completes and field-tests each document, which is then distributed directly to teachers.

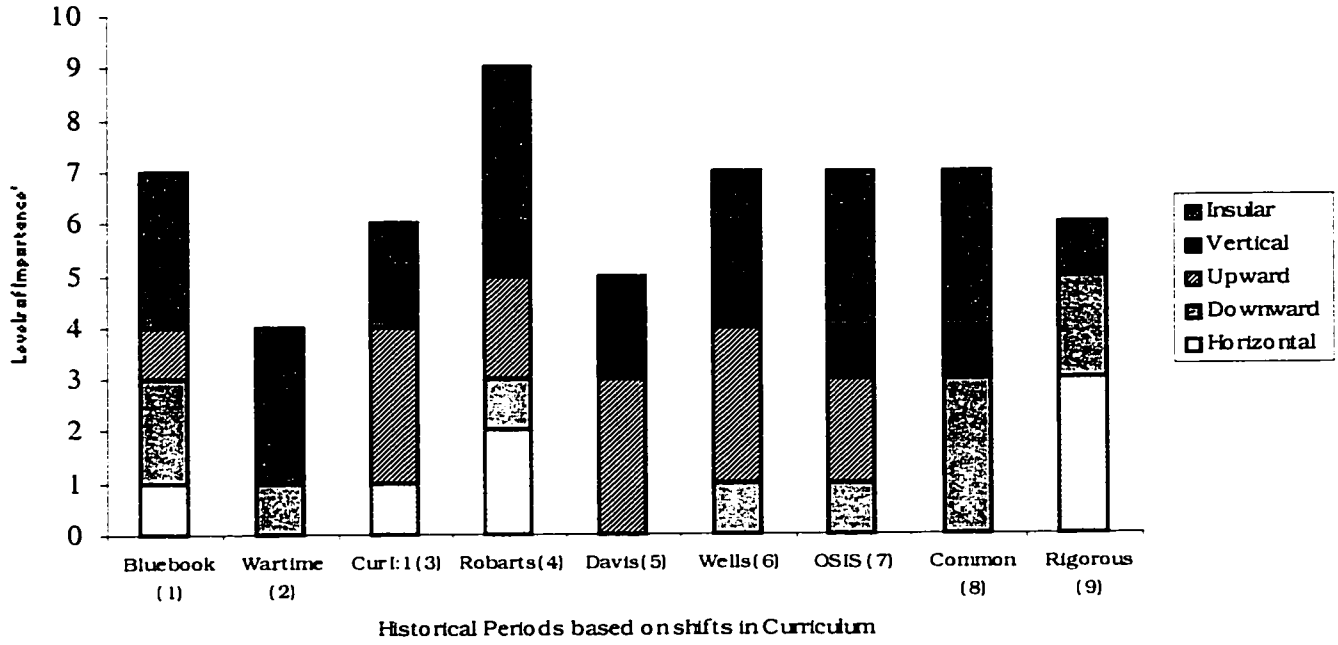
Figure 10.9 - Dimension C (Loci of Curriculum Integration Development and Involvement)



*percentage is based upon the numerical assignment of importance displayed in figures 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1, and 9.1 in Appendix - (Negligible = 0, Low = 1, Medium = 2; High = 3).

Dimension D – When is Integration Possible at the Grade 7-8 Years?

Figure 10.10 - Dimension D (The Relationship of Grades 7-8 to other Levels)



*Importance is based upon the numerical assignment of importance displayed in figures 1.1, 2.1, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1, and 9.1 in Appendix - (Negligible = 0, Low = 1, Medium = 2; High = 3).

While naturally seen as a separate time of adolescence (insular) for most of this study, grades 7 and 8 have been tied to both the elementary and secondary systems at various periods over the last 60 years. Initially, grade 8 was considered the end of formal schooling for most students. By period three, however, 7 and 8 were linked to grades 9 and 10 to create the Intermediate Division in an effort to keep students in school until the end of high school. This structure was maintained up until period 7, with a definite linking of this age group to higher education. In a revolutionary move under the Liberal and NDP governments (period 8), however, this grade level was first isolated (as the Transition Years) and then re-connected to the elementary system (through the Common Curriculum Grades 1-9). This arrangement was

maintained in period 9 by the Conservative government (except for grade 9, which was fused back into the secondary system). In an effort to achieve greater accountability, the present Ministry appears to further subdivide the levels (horizontal) so that certain grades become responsible for a specified amount of expectations.

Dimension E – How should Integration be Appear (Methods/Approaches)?

In comparing the 9 periods, it would appear that certain forms of curriculum integration serve certain purposes in relation to the other dimensions (objectives, structure, etc) favoured by the Ministry. Over the periods, the Ministry vacillates from promoting a form that maintains and strengthens an essentially subject-based approach to education to choosing a form that actively undermines the status quo. These choices seem to inevitably depend on the particular circumstances and educational philosophy of the period. The forms outlined below can be grouped into those that are ***subject-supportive, decentralized-group, subject-destructive,*** and ***chameleonic***.

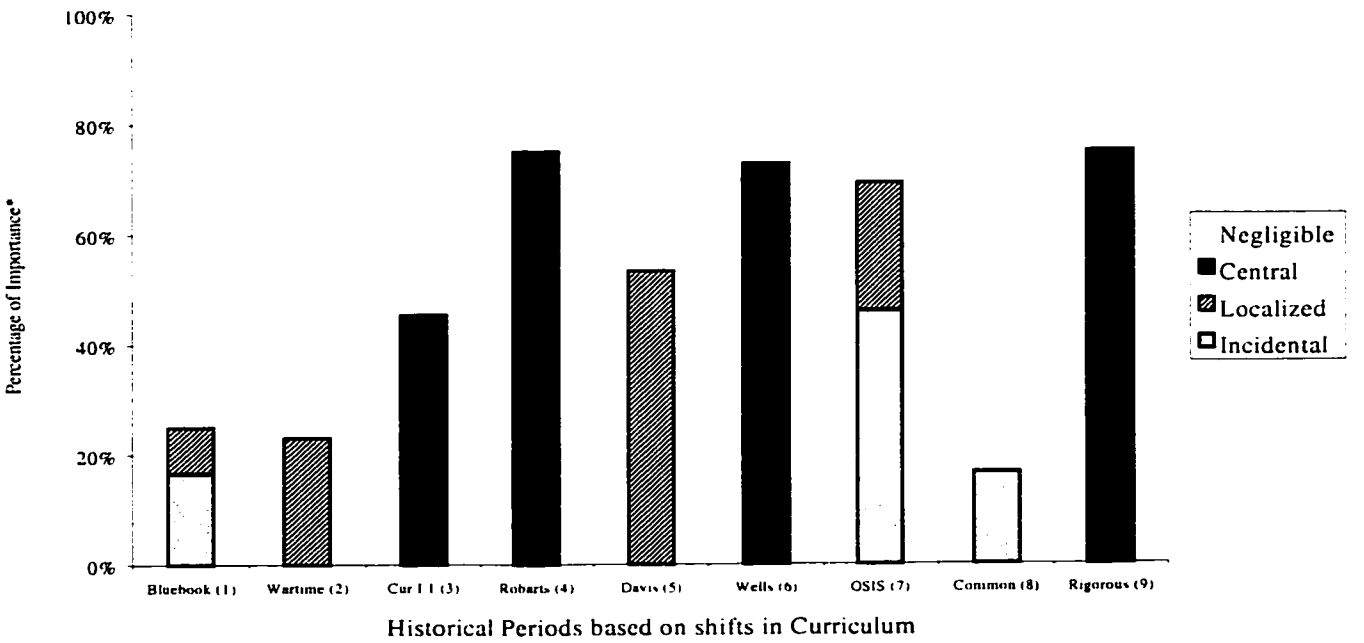
Subject-Supportive Forms

This first grouping is, in general, supportive of the disciplinary system. All act as merely correctives that reinforce meaning, point out connections, and allow for the inclusion of more material. These include the Nested, Cross-disciplinary, Correlated, and Insertion approaches.

Nested

As can be seen in figures 10.2, 10.3 and 10.11, the nested approach corresponds quite closely to the changes in perception seen in Dimension A, especially content and skills. If these two elements are seen as unimportant, such as in periods 1 and 2 (or if the skills are quite broadly defined, as in period 8), the nested approach is not used. However, if content and "back to basics" skills are highly promoted (such as in periods 4, 6 and 9), this form becomes of paramount importance (in fact, in periods 4 and 9, it squeezes out most other forms). This could be because the elements are very concrete and accountability is required during these periods – therefore the most mechanical and pseudo-disciplinary approach is used. As well, this form can generally be seen when the Ministry is attempting to re-centralize its power and reestablish a dialogue with the individual teacher.

Figure 10.11 - Dimension E (The Nested Approach between Periods)

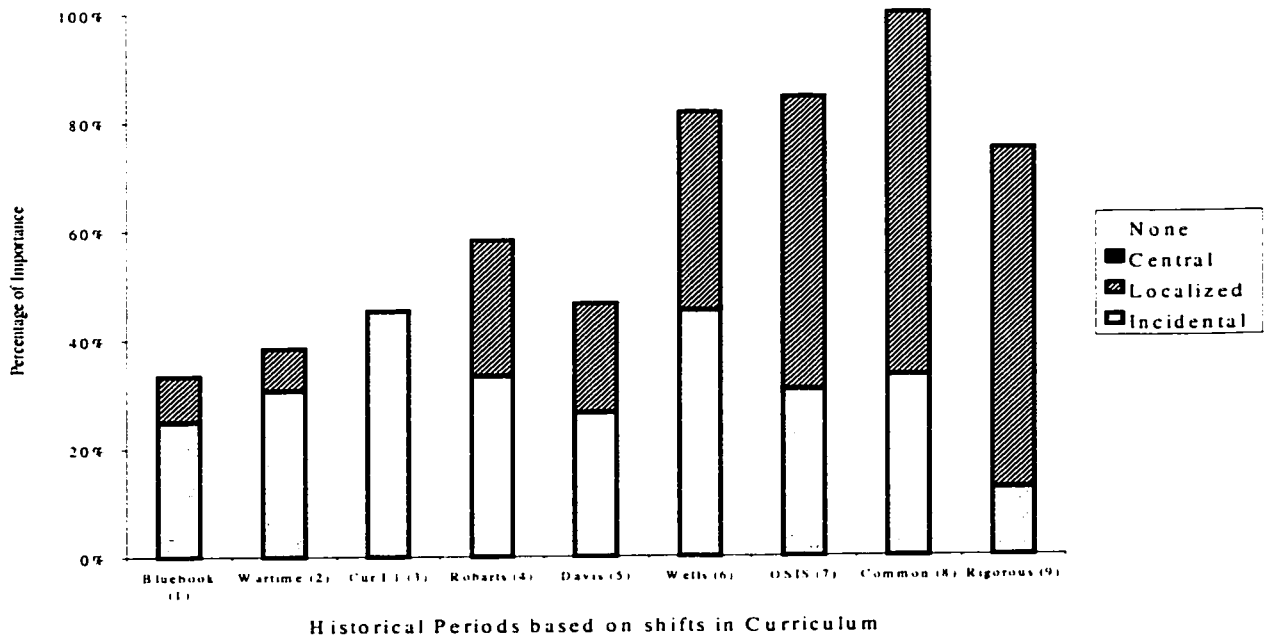


*Percentages in figures 10.11 to 10.20 are based on conversion from the numerical assignment displayed in charts 1.2, 2.2, 3.2, 4.2, 5.2, 6.2, 7.2, 8.2 and 9.2.

The Crossdisciplinary Approach

Considered by many theorists as primarily a university-based form of integration, the cross-disciplinary approach has never been utilized in any formalized sense (such as devoting an entire course to the history of art, for example). However, it has been mentioned more frequently in later years. This may be linked to the changes outlined in Dimensions B and D. In the early periods, when grades 7 and 8 were strongly tied to a child-centred elementary system, this form had no place. It was only as these grades became strongly linked to higher education that it could find meaning. The pinnacle of this form can be seen in period 7, not coincidentally occurring in the same curriculum (OSIS) that tied grades 7 and 8 to the senior years. Most recently, the cross-disciplinary approach has been eclipsed by other integration methods. While the subject-centred objectives of period 9 may explain the form's continued allure, the Ministry also appears to view it with trepidation, fearing that its uses may be out of reach of "elementary" students.

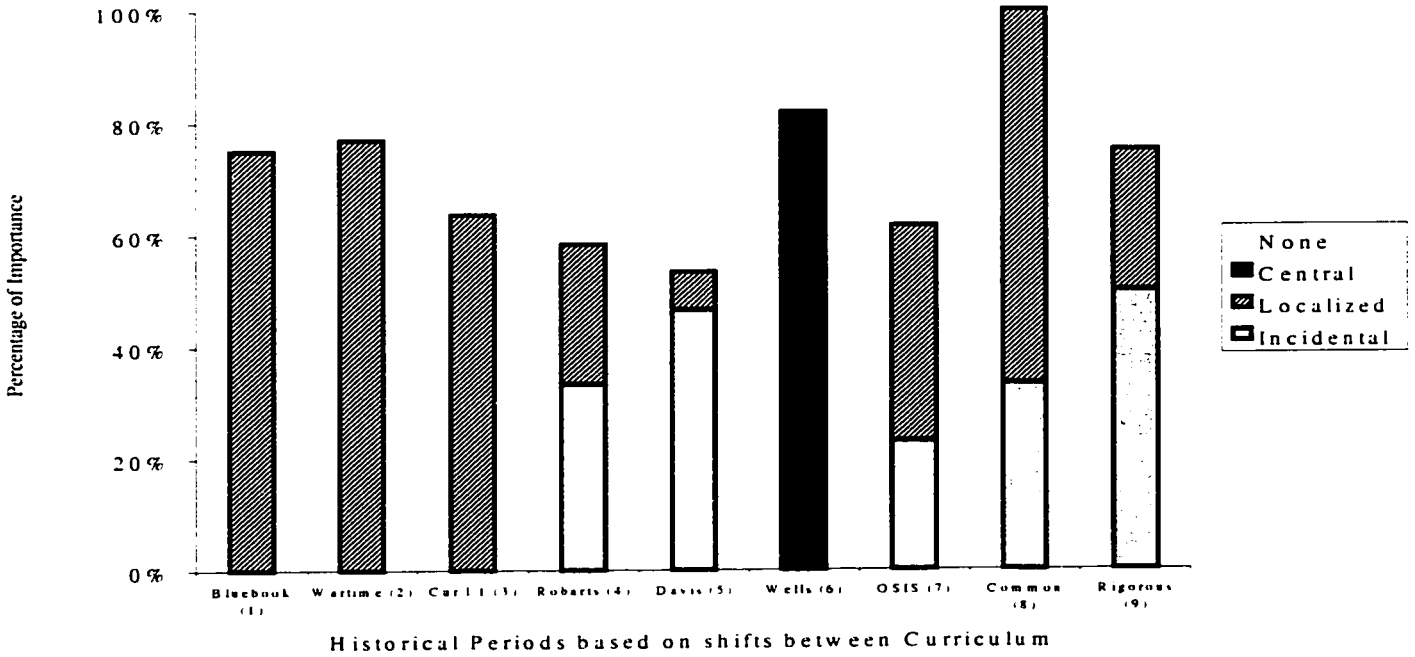
10.12 - Dimension E (The Crossdisciplinary Approach between Periods)



Correlation

While Correlation is a ghostly presence in each period, it is rarely the primary form of integration. Rather, the Ministry frequently uses it as an *ad hoc* technique to reinforce specific connections that it sees between subject areas. Promotion is always done through suggestions, never mandated – in doing this, the Ministry shifts the burden of integration to the classroom level. It is perhaps this benign use that has allowed this form to remain omnipresent. However, it is rarely seen as more than an optional means to help students see the bigger picture, while staying within the bounds of a disciplinary system. This position of makeshift solution holds especially true in period 6. Wells had promised a "back to basics" curriculum, but the structure of the educational system would not allow a more radical, centralized approach. Correlation, therefore, represented a middle of the road solution that allowed teachers leeway while promoting a more rigid curriculum than had been seen previously.

Figure 10.13 - Dimension E (Correlation between Periods)



Insertion

Rather than used to reinforce meaning or to cure a fragmented curriculum, Insertion appears to have a more pedestrian use for the Ministry. It is solely used to include blocks of material whose integrity must be maintained, but are not important enough to be given their own designated "subject areas". Pragmatically, the curriculum designers find the most suitable areas in the programme – this can be determined by natural linkages (such as conservation into geography) or by just slotting the material into subjects with remaining space (such as conservation into the Mathematics section in period 3). By period 7, however, the guidelines are created systematically by a great number of stakeholders, rendering this *ad hoc* form of integration no longer viable.

Figure 10.14 - Dimension E (Insertion between Periods)

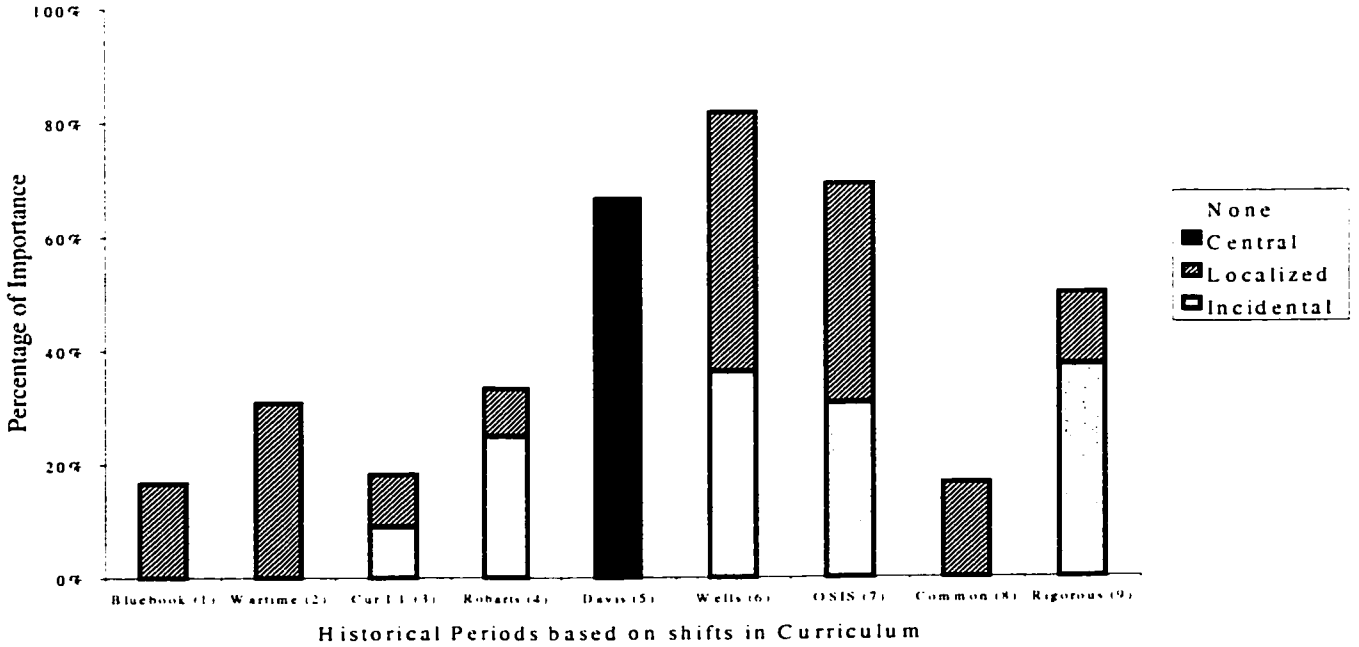
Decentralized Group Forms

A second group exists whose main purpose is to promote communication within the school environment. This can only be accomplished if a great deal of leeway is given in terms of wide subject areas and interchangeable grade levels. Indeed, the vaguer the Ministry documents are, the more likely this form of integration will occur.

Multidisciplinary

As seen above, no hospitable environment is given to this form during the first four periods. In the first two, the school as an entity with various subject teachers simply did not exist. Even during the third and fourth, teachers may have been included in the creation of the curriculum, but the actual realization of the programme was still considered a solitary act (see Dimension C). It is only when the curriculum documents are left purposely vague in period 5, and teachers given wide berth

Figure 10.15 - Dimension E (The Multidisciplinary Approach between Periods)



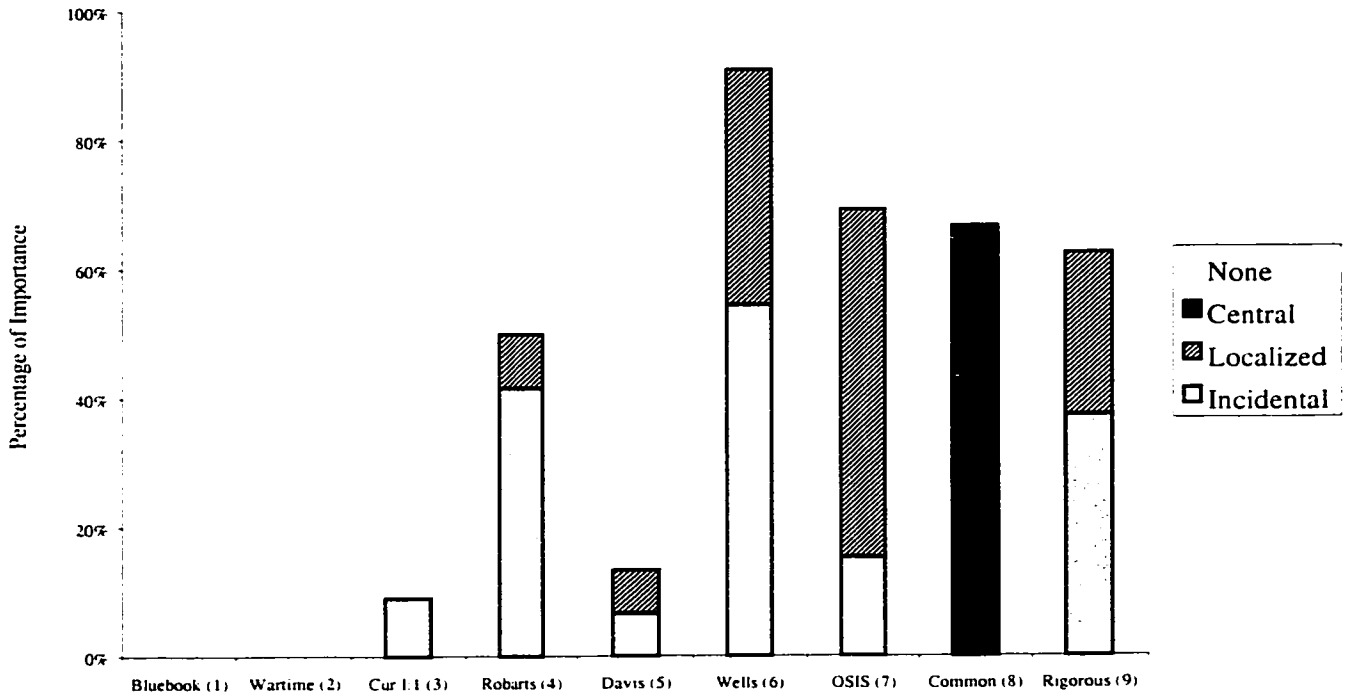
that this form can grow. Each document extols the virtues of team teaching, co-planning, and teacher empowerment at the school level. To the Davis administration, this is the paragon of integration. As the Ministry attempts to take more centralized control of the curriculum, and other external stakeholders (like boards) become involved, this primarily school-based form begins to dwindle. An incredible resurgence does occur in Period 8· due to the scattered outcomes of the Common Curriculum.[1] Teachers must meet to delegate who must teach what, at which time. However, this is short-lived as the Harris administration reimposes control over the subject areas of the curriculum.

Pluridisciplinary

Like the Multidisciplinary approach, this form is shown little sympathy until quite recently. Period 6 makes vague references to "programs" when discussing subject areas, indicating that certain skills will be continued over a number of years to keep track of a student's progress and to allow clear communication between subject teachers. This is taken seriously for the first time in period 7, where principals and teacher-coordinators are charged with the systematic coordination of subject matter. In particular, as the OSIS documents are related to the higher levels (Dimension D), much consideration is given to Language programs, Technology and Business Studies, History and Contemporary Studies, and an Allied Arts program. By period 8, the Common Curriculum allows little choice but the imposition of the pluridisciplinary approach. Because outcomes are prescribed in a 3-year timeframe, teachers must meet and delegate responsibilities themselves. This is cut short, however, as the next period creates an almost horizontal grade system with extremely clear expectations for each subject area.

[1] While this form appears low in the chart, it is only because little explicit mention is made. Implicitly, this form should be shown as high and central.

Figure 10.16 - Dimension E (The Pluridisciplinary Approach between Periods)



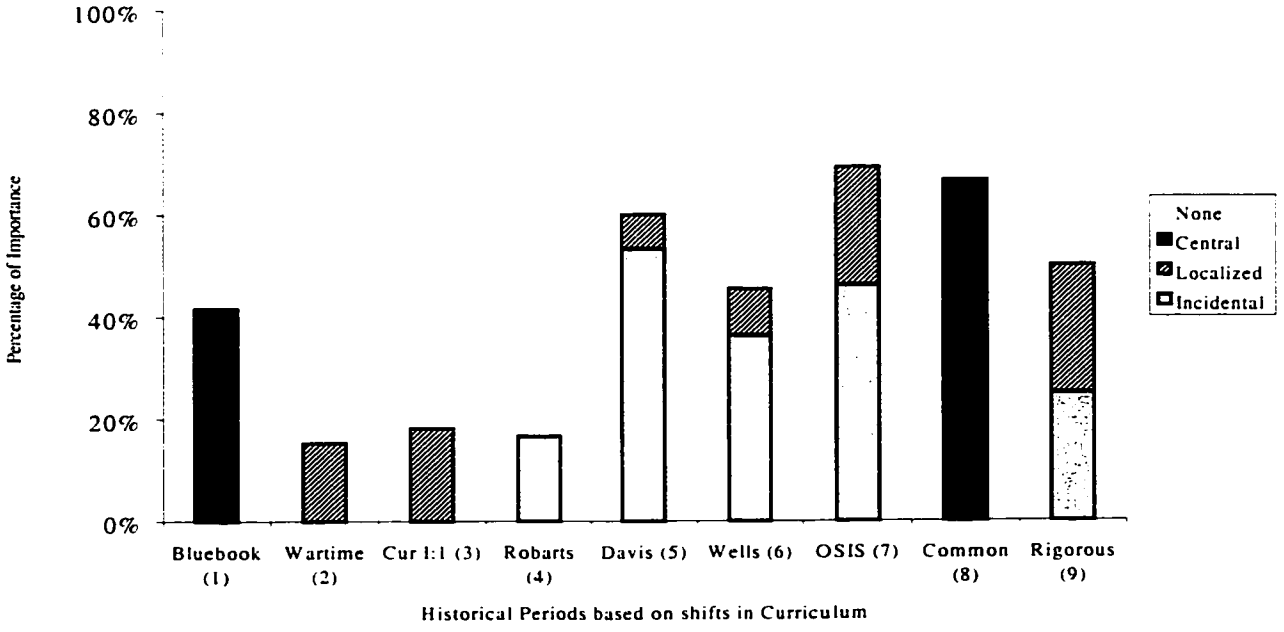
Subject-Destructive Forms

These forms (e.g., fusion, transdisciplinary) serve the purpose of tearing down the status quo within the curriculum. At certain, revolutionary times in its history, the Ministry perceives that a certain philosophy (usually child-centred) is the most beneficial means of educating the young. To achieve this end, certain artificial barriers (like subjects) have to be reduced or removed to allow change to take place. At other times, where accountability becomes a great concern (like periods 4 and 9), these forms all but disappear.

Fusion

Fusion appears strongly during the most radical moments of the Ontario curriculum's history, and then fades into the background. In the instance of period 1, the changes made to the curriculum (the fusion of 15 subjects into 7) become the generally accepted format for the next two generations. This may be due to the massive amount of support given by contemporary scholarship and the fact that every other provincial ministry endorsed this form at the time. By the 1950s, however, this form is rejected as valid (this is shown by Robarts' fissioning of the Social Studies course into History and Geography) on the grounds that it is weak and problematic. While nebulous mention is made to this form in later years (such as "Classical Studies" in period 6), it is only during the extreme era of the Common Curriculum that it makes a recovery. Rather than maintaining the traditional subjects, the Ministry fuses them into four skill areas. This revolutionary approach is short-lived however, and Period 9 experiences a severe counter-revolution as the Harris administration reorganizes the curriculum along distinctly disciplinary lines (it discusses an integrated Arts guideline – but has subsequently begun dismantling this concept).

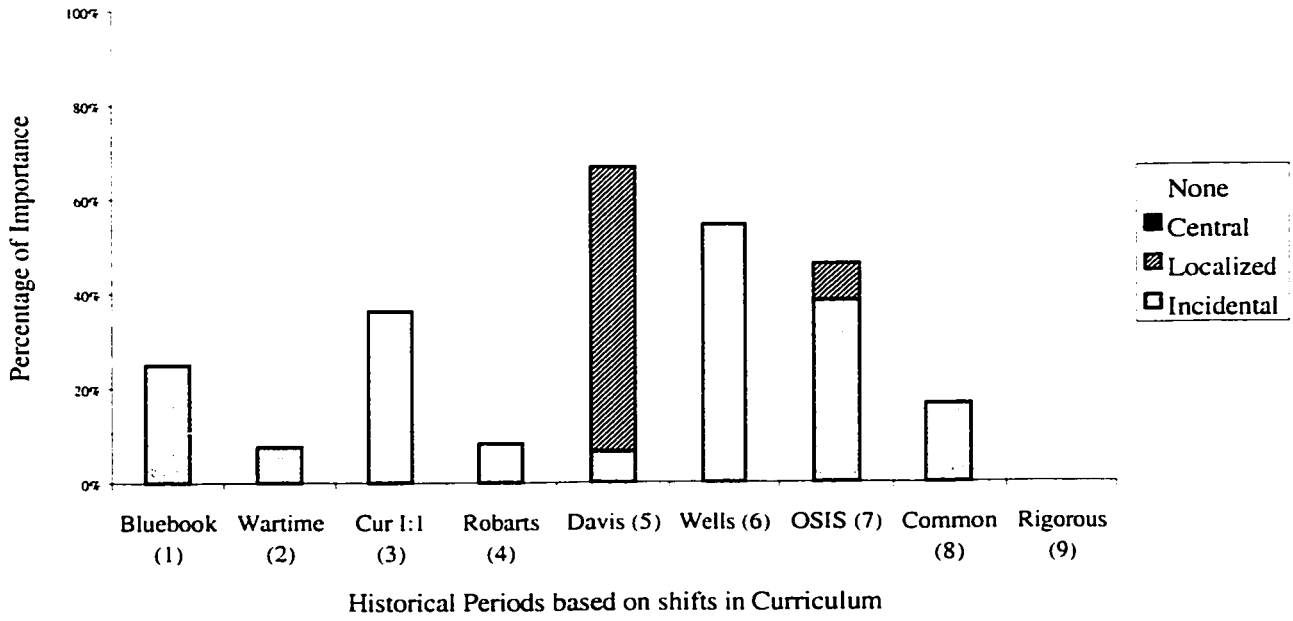
Figure 10.17 - Dimension E (Fusion between Periods)



Transdisciplinary

The Transdisciplinary approach appears to contain more rhetoric than any concrete realizations in this century. Almost every period makes some vague mention that the curriculum should pay heed to the students' interests, but to greater or lesser extents, other forms inevitably take over. In most instances, the Ministry discusses independent projects, team planning, field trips and experiential learning. However, even in Period 5, the era that typified "student power", many caveats are tacked on by the Ministry to prevent chaos from ensuing. It would seem that the Ministry could never make the great leap of faith necessary for this approach to be attempted in any great measure. It is interesting to note that during periods of great centralization and enmity for the child-centred approach, such as 4 and 9, this form is not to be found. As well, it would seem that as more stakeholders become involved in period 6, 7 and 8, this form is rendered unfeasible.

Figure 10.18 - Dimension E (The Transdisciplinary Approach between Periods)

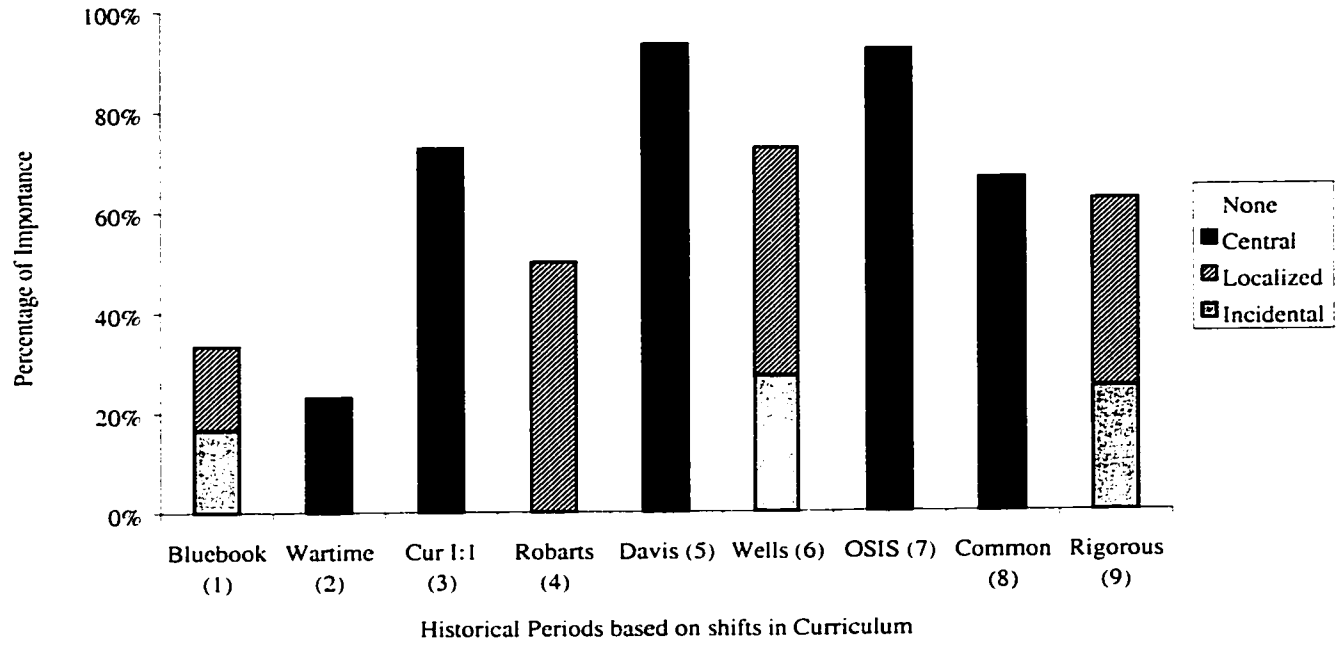


Chameleonic Forms

This grouping refers to those forms that, at certain times, and under the influence of certain other dimensions, may endeavour to support or destroy the disciplinary system. In most instances this would be a form that could, in one period, serve a subject-centred objective (and reinforce a disciplinary agenda), while in the other periods promote child-centred education (with no adult-inspired boundaries) equally as well

Thematic

Figure 10. 19 - Dimension E (The Thematic Approach between Periods)



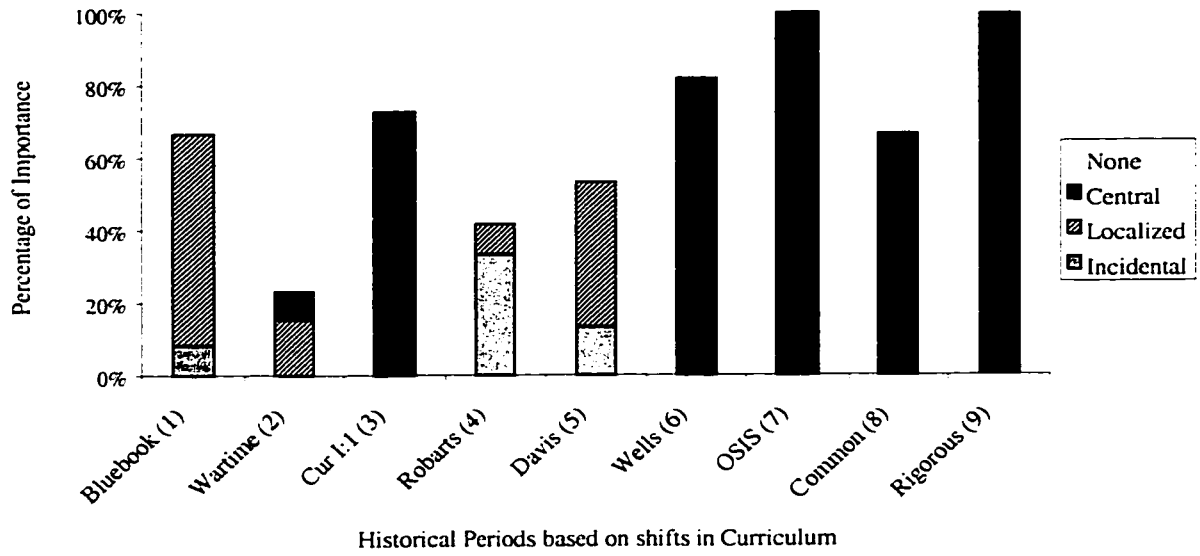
The thematic approach is, by and large, one of the most utilized forms of integration by the Ministry. It is also the most widely defined. When certain attributes coincide, the approach supports the disciplinary structure admirably. In periods 1, 3, 4 and 9 themes remain distinctly within separate subjects and are created by the curriculum designers themselves. Called "units," their main purpose is to give meaning and acceptance to the traditional layout. At other times, when a radical child-centred approach is mandated, the thematic approach mutates into student-directed projects that give

no consideration to subject boundaries (seen in periods 2 and 5). Rather, teammanship, discovery and self-knowledge become the desires of this form. At more moderate time, the Ministry recognizes that this form has its uses, but is just not sure what side to give credence to – the subject or the student (periods 1, 6, 7). What results is a mishmash approach of the two. Period 8 is the oddity- because no subject areas stand in its way, the thematic approach is only bounded by the expected outcomes and student interest.

Harmonization

When employing this form, the Ministry generally continues to maintain a disciplinary system. However, it also believes that certain skills (or in the rare instance, values) transcend the bounds of this organization. If language skills, for instance, are reinforced outside of its specific subject area, it is posited that students will learn them in a shorter period of time while being able to see their relevance. While it is discussed in earlier periods, it is rarely brought to fruition. Inevitably, to accomplish this feat, a considerable amount of sophistication and agreement must be reached between the creators of the various subject documents. This is only seen, to any great extent, after the development of the Across-the-Curriculum format introduced in period 6. While only this form remains as just a suggestion during the Wells' administration, it naturally evolved into a mandated approach under OSIS. After reaching an apex during this period (where not only language was harmonized, but a host of other skills and values as well), this form was then turned one crank further to help break apart the disciplinary system by the Common Curriculum. This was done by allowing all skills and values (outcomes) to be promoted in any area of the curriculum. In an attempt to reinstate the traditional system during period 9, the Harris administration strongly reined in this form (even Language remains in one place). While appearing strong, harmonization during this period was relegated solely to the use of computers.

Figure 10.20 - Dimension E (Harmonization between Periods)

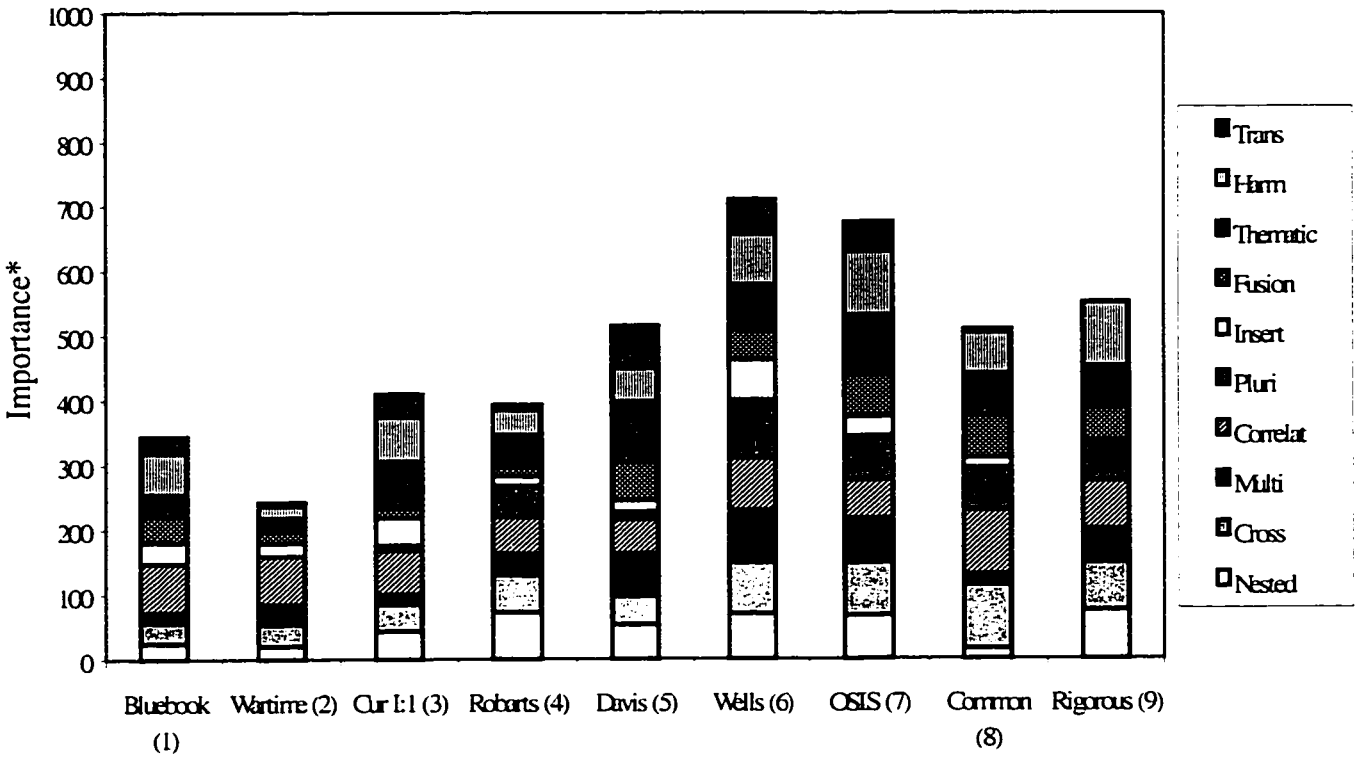


Overall Comparison of the Importance of Elements between Periods

In the earlier periods there seemed to be an acceptance of one or two specific methods to integrate the curriculum. In period 1 the Department favoured fusion. In period 2 this included the thematic approach. By period 4, the definition of the term shrank to "the nested approach". As shown in the chart below (figure 10.22), there was a gradual increase in the widespread acceptance of a variety of curriculum integration methods by the Ministry. Rather than merely mentioned in a preamble or appendix, numerous approaches were woven into the heart of each curriculum guideline. In periods 5, 6, and 7, curriculum designers recognized the importance of all variations of curriculum integration and promoted their use based on the immediate circumstances of the teaching situation. Having peaked in the 1980s, the Ministry appears to return to a more prescriptive method of selecting "the perfect" method of integration. During the Common Curriculum this included the crossdisciplinary approach and correlation. In the present period this trend appears to be continuing

unabated. It must be noted that the numbers in the last period were artificially inflated due to harmonization.

Figure 10.21 Overall Importance of Integration Methods/Approaches (Dimension E) between Periods

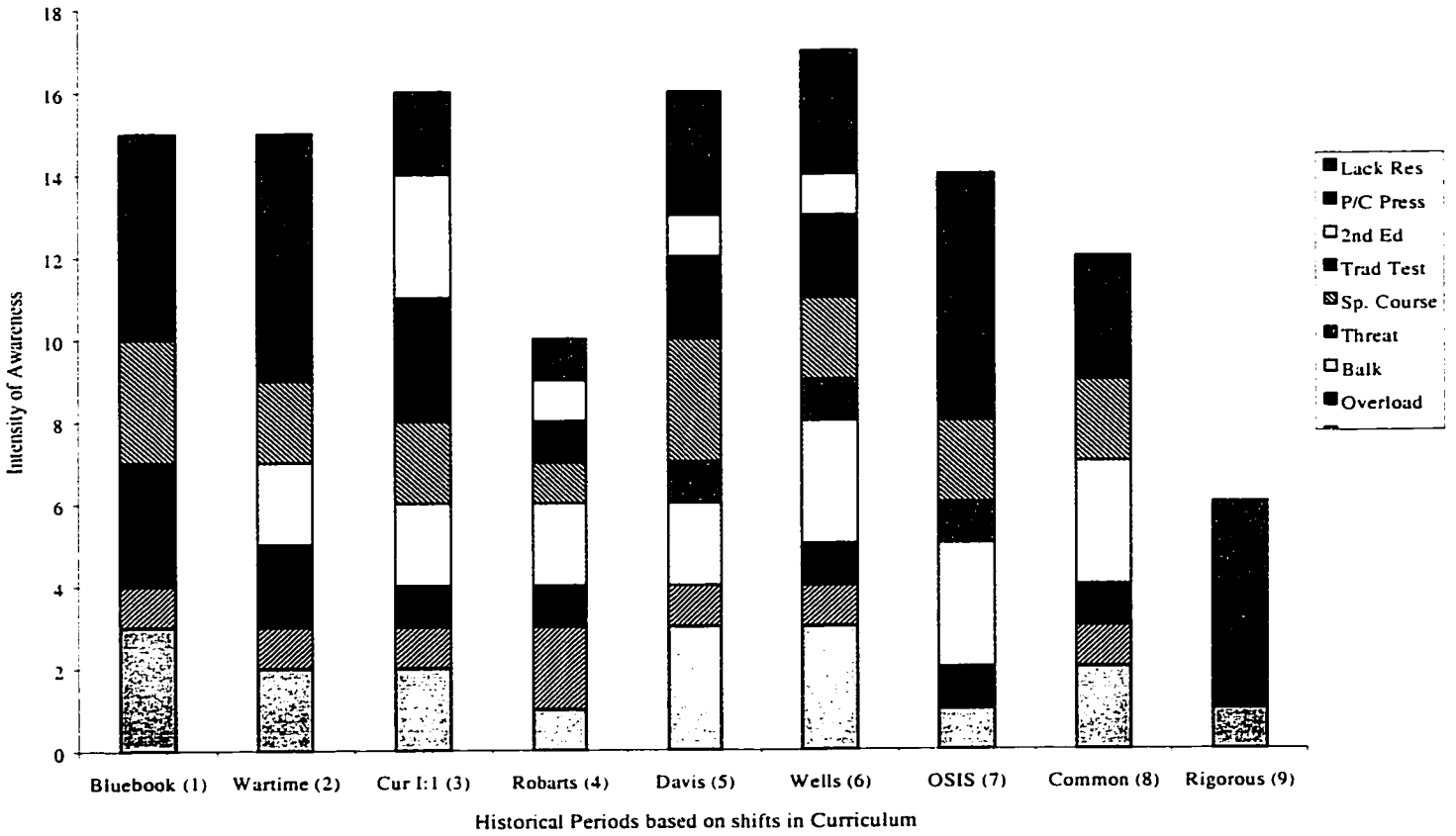


*The numbers 0-1000 represent the potential of 100% for each of the 10 methods/approaches represented. The percentage of importance for each score is based on results of Figures 10.11 to 10.21.

Dimension F – Awareness of Implementation Impediments

As seen in figure 10.22, each period seems to show a certain amount of awareness of hindrances in regards to implementing curriculum integration initiatives. In general, this peak of awareness was reached in the mid-1970s (excluding period 4) with a gradual dropping-off of interest from period 7 onward. However, some comment can be made on the exact areas (curriculum, teacher and external hindrances) in which the Ministry chose to focus upon at certain times.

Figure 10.22 - Dimension F (Awareness of Hindrances to Integration)

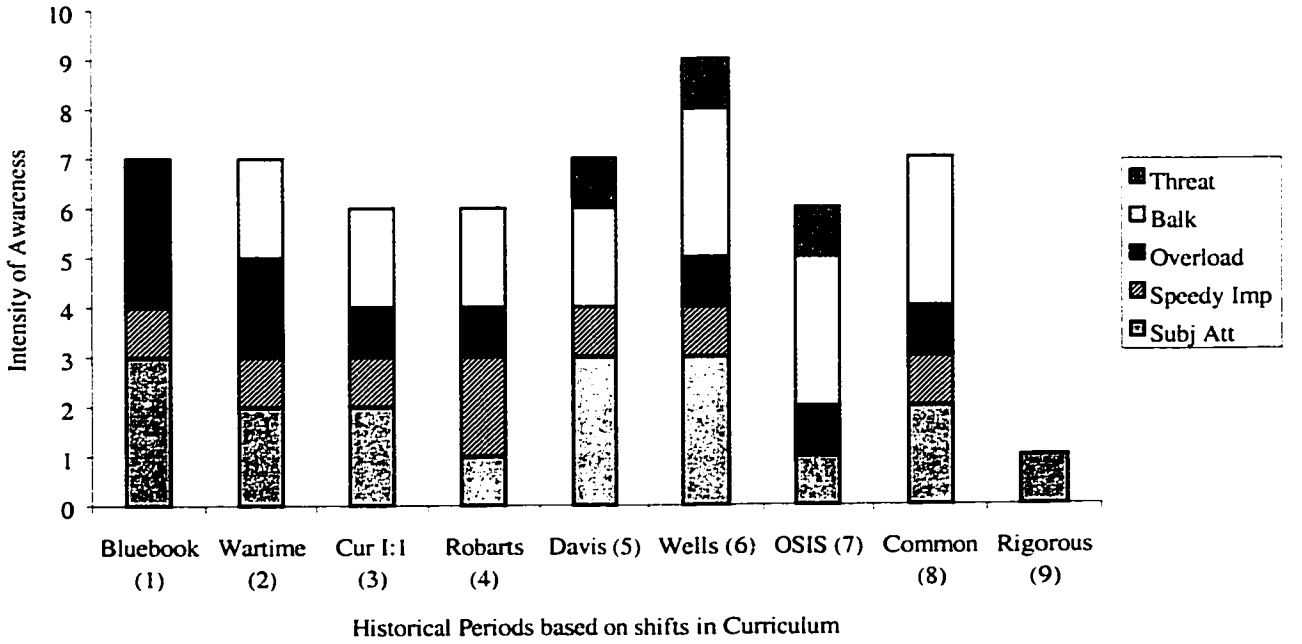


*Intensity of Awareness in figures 10.22, 10.23, 10.24, 10.25 is based upon the numerical assignment of importance displayed in Dimension F Profiles outlined in Appendix C (Negligible = 0, Low = 1, Medium = 2; High = 3).

Teacher-Related Impediments

On the whole, the Ministry seems to maintain a fairly stable view of these teacher-related hindrances (except for the final period). It continually points out that teachers should not feel attached to one subject, but view their position as more of a generalist. While being more conspicuous during particular periods, it never fades from view. On the other hand, speedy implementation and curriculum overload have never really been considered important issues. The only time that this seemed of concern was in relation to the radical changes made in period 1. The one area that has grown considerably over time has been "fear of balkanization". Teachers are entreated to meet and act as a school-team – this is in direct relation to the growth of the decentralized forms seen above. Period 9 is of particular interest for this study. In contrast to the Common Curriculum, the Rigorous Curriculum shows very little awareness of any hindrances that teachers may face in implementing the new program.

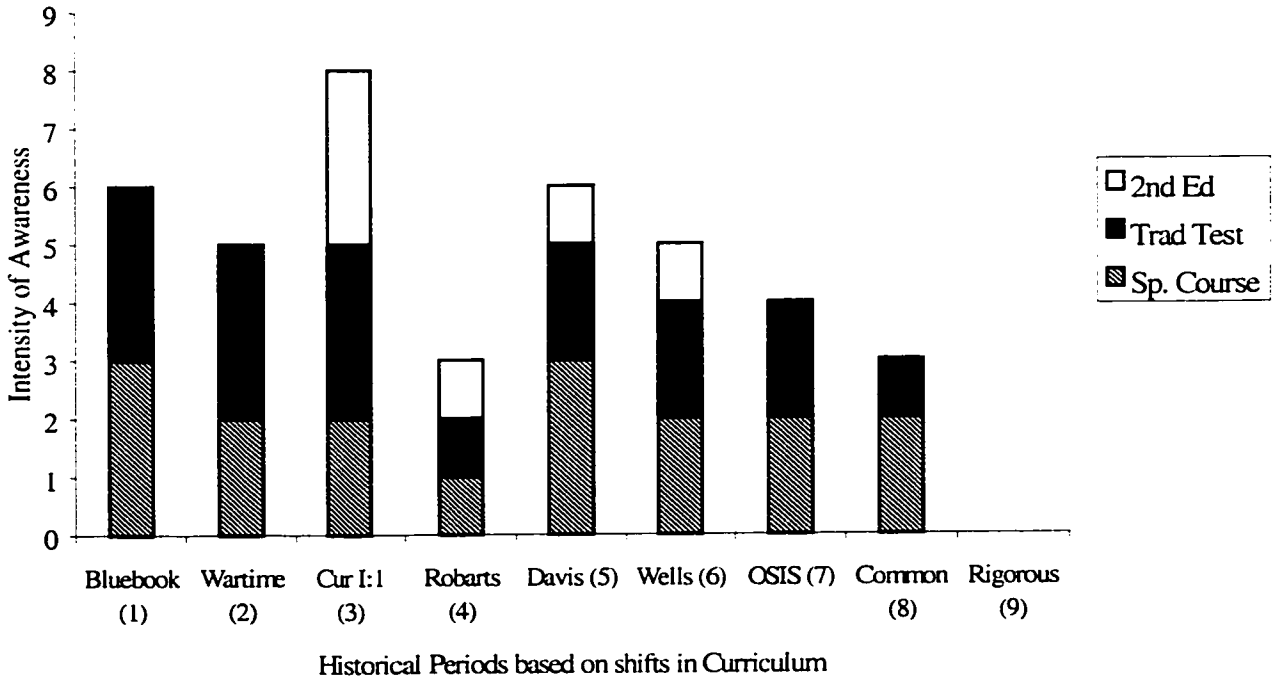
Figure 10.23 - Dimension F (Teacher-Related Impediments to Integration)



Curriculum-Related Impediments

Except for the final period, the Ministry appears to have always taken into consideration that a specialized, rigid curriculum would choke interdisciplinary integration. With this in mind, all guidelines were given varying degrees of flexibility. In periods 3-6, the Ministry also made special mention of the hazards of linking the grade 7-8 level to secondary education. This was caused by a fear that it may lead to a premature acceptance of subject-centred teaching methods. This tends to disappear under OSIS and Period 9 (which, in fact, promote this linkage), and the Common Curriculum (which tie this level more closely to the elementary years). As outlined in the context sections of period 8 and 9, traditional testing makes a comeback after being eschewed for 50 years. It is during these periods that accountability considerations appear to take precedence over integration endeavours.

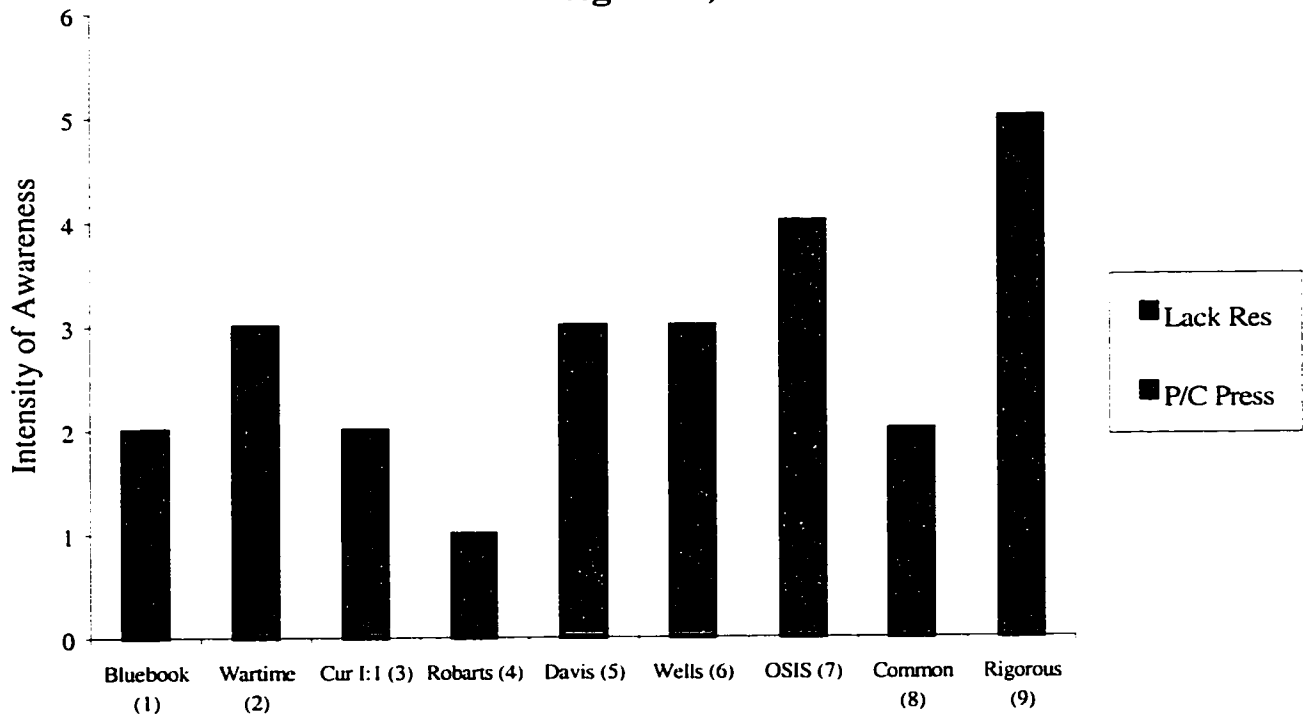
Figure 10.24 - Dimension F (Curriculum-Related Impediments to Integration)



Outside Forces Impeding Integration

Lack of resources appears to be a constant fact of life for the Ontario education system, even in times of great prosperity. As time progresses, however, the Ministry seems more acutely aware of this, however, and even makes some suggestions to ameliorate the situation. Of greater interest is the importance parents' comments play in the final period. After sitting dormant for so long, it would appear that the Harris administration has now included them as stakeholders in the curriculum implementation process as informal evaluators and watchdogs.

Figure 10.25 - Dimension F (Outside Forces that Impede Integration)

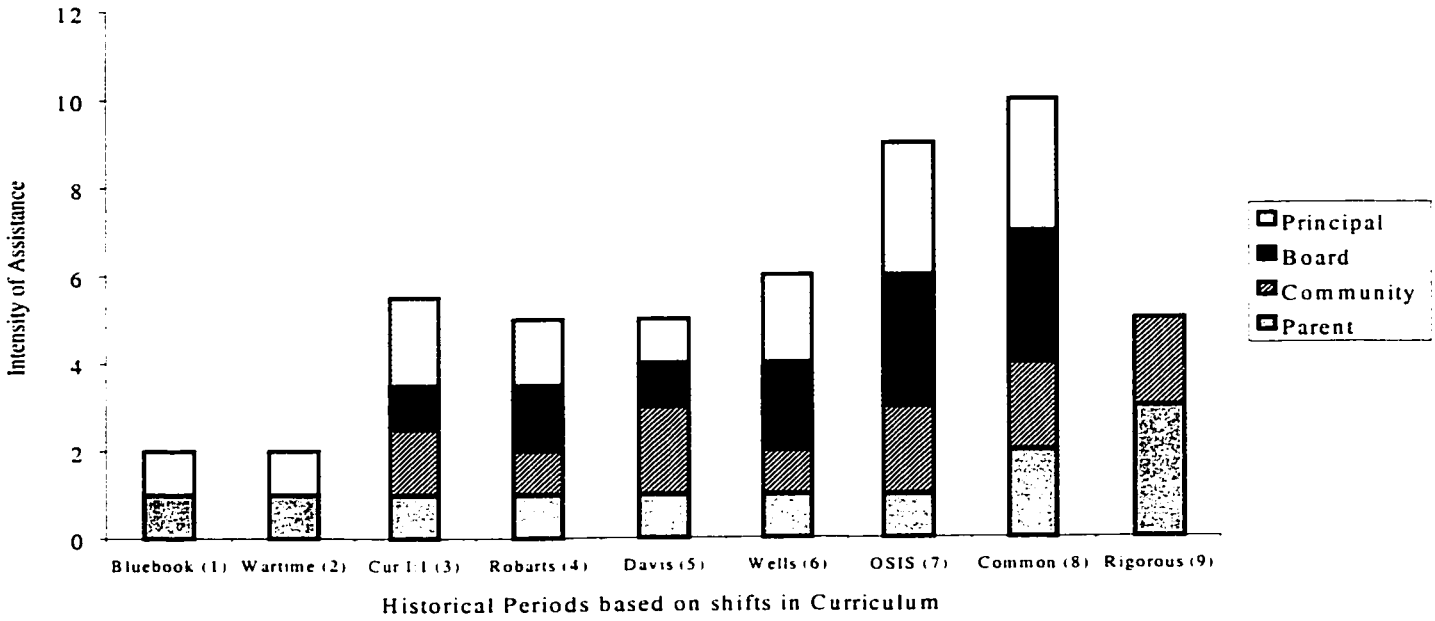


Dimension G – Assistance for Implementing Curriculum Integration

As in Dimension F, certain sub-groupings can be distinguished as linked focal points for the Ministry over the past 60 years when addressing assistance for the implementation process. The first is the search for outside assistance, the second has to do with professional aid and development, and the third deals with curriculum-related assistance.

Outside Assistance

Figure 10.26 - Dimension G (Outside Assistance for Integration)



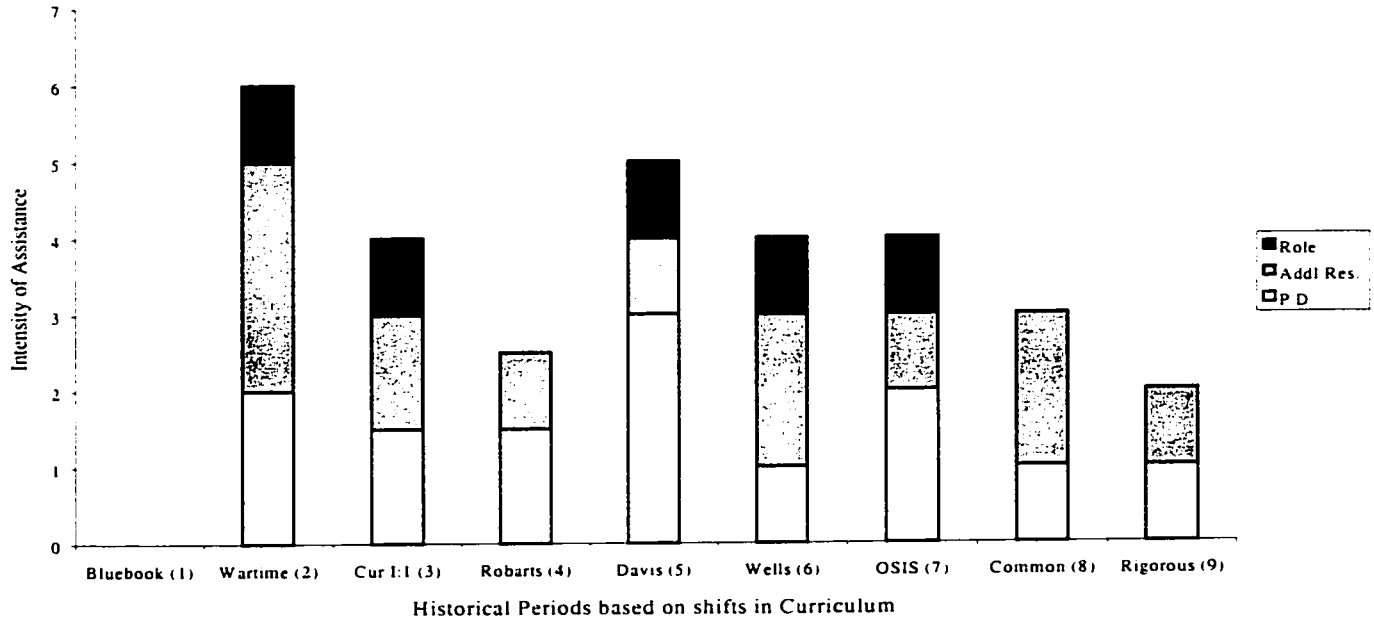
*Intensity of Assistance in figures 10.26, 10.27, 10.28 is based upon the numerical assignment of importance displayed in Dimension G Profiles outlined in Appendix C (Negligible = 0, Low = 1, Medium = 2; High = 3).

In total harmony with Dimension C, the Ministry goes through an evolutionary process. Originally, it seeks little help from any outside stakeholders not directly involved with classroom activities. It is only as the system becomes increasingly decentralized (in a first abortive attempt in period 3, and in a more sustained effort in periods 6-8) that the Ministry downloads much of the

responsibility for facilitating the implementation process to principals and board officials. It is only in the final period, that a dramatic shift in their importance is witnessed. This can be largely attributed to the Harris administration's conscious effort to distance the boards and local administrators from the curriculum aspects of schooling. Their influence is gradually replaced by more grassroots organizations. Suggestions are continually made from period 3 onward to make use of community facilities, but it is only in periods 7-9 that deals are made with the private sector to help fund and provide resources for schools. As well, in the final two periods, parents are given an active role (through councils) in regards to curriculum evaluation.

Professional Aid

Figure 10.27 - Dimension G (Professional Aid)



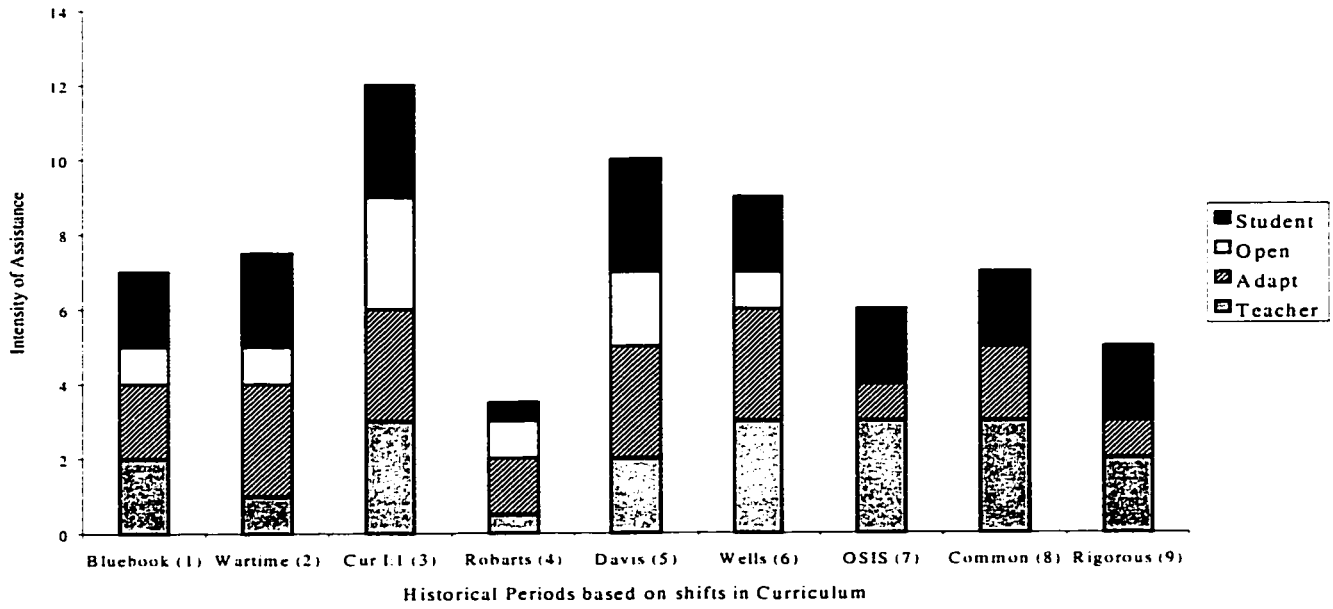
While there appeared to be a growing awareness that teachers lacked resources, it would also seem that the Ministry has felt less and less responsibility to deal with this issue. In periods 2 and 6 the central authority does take it upon itself to issue additional resources directly to teachers in the

form of additional literature, support documents and equipment (in period 8 it does the same but through the auspices of the board). With the introduction of revolutionary curricula (seen in periods 2 and 5), or fairly dense documents (as with period 7) the Ministry also makes offers of professional assistance to teachers. In the last few periods, these issues are inevitably downloaded to the other sections of the educational community as the Ministry tries to reestablish itself as a sole regulatory body. While the issue of teacher mentoring (role-models) arises occasionally, it is never developed as a feasible method of assistance.

Curriculum-Related Assistance

Like professional assistance, flexibility and teacher freedom has been gradually decreasing over the last 60 years. In the first two periods, due to the isolation of the teacher the Ministry gave some leeway. By period 3 a short-lived revolution occurred to give the operating core of teachers as much freedom as possible to educate students. This was immediately followed by a fairly harsh backlash of centralization in the early 1960s. When control of the curriculum was unbridled in the late 1960s (period 5), adaptability and open design of the curriculum were not as radically addressed. These were tamed down even further in the 1970s and 1980s. While the Common Curriculum revitalized adaptability somewhat, its effects were short lived. The new rigorous curriculum leaves little room for maneuverability. Indeed, teachers have had little say in the outcomes of education for 25 years. The one aspect of this grouping that has maintained some strength over the years is teacher support of the curriculum (in line with the fear of balkanization seen in Dimension F). However, this statement by the Ministry has rung hollow in later years where teachers have less ownership of the curriculum – teachers are more expected to follow the documents than to question them. As well, students are consistently encouraged to collaborate on local manifestations of the curriculum (i.e. plan a project). However, this entreaty is more to interest and motivate the student than to genuinely solicit help on curriculum design (as this may lead to chaos).

Figure 10.28 - Dimension G (Curriculum related Assistance for Integration)



OVERALL REMARKS OF PART I

While the Ontario Department/Ministry of Education has promoted many variations of the method since 1937, it is quite clear that the forms of curriculum integration they routinely use are the ones closest to the disciplinary structure. Most prominent among these are the Nested and the Harmonized approaches. Because most remaining approaches are perceived by the Ministry to be based on faith rather than proven fact, they continue to be quite politically charged. Themes, for instance, have been either strongly supported by adherents or abnegated by others as mere fads. In most cases, the form cannot be defended logically, because of lack of strong empirical analysis. If the form proves to be disappointing in one period, even if it is due to improper use, the Ministry unceremoniously dumps it in the next with little attempt to show exactly why it failed. These changes seem to have less to do with an evolution of thought and research concerning this method, and more closely tied to a particular administration's overall beliefs in the educational process.

Part II

Perspectives on Curriculum Integration

Teachers and Administrators in 8 Eastern Ontario Schools

Introduction

Part II of this thesis is driven largely by the research question asked on page 32: "What does curriculum integration mean to contemporary school administrators and teachers of the intermediate level (Grades 7-8)?" Participants who were asked to define this term gave a wide range of answers depending on their location, experience and personality. As in Part I, however, a great deal of consensus was found amongst them regarding the broader, philosophical Dimensions (A and B) while a certain amount of variation was seen in the forms they employed (Dimension E). These similarities and differences will be detailed in Part II, while some general conclusions will be offered in the "Conclusion and Discussion" section of this thesis.

Context and School-Wide Integration Activities

For this study, eight publicly-funded schools with quite different configurations were chosen to represent the views of teachers in Eastern Ontario in regards to curriculum integration. The procedures and plan of analysis of these schools are discussed in the methods section of this study (pp. 45-51), while the sample size, interview dates and codified responses are outlined in detail in Appendices G and H. Briefly, those interviewed are listed in figure 11.1 below.

Figure 11.1 - Codes for Schools and Participants

#	Nickname of School	Qualifiers	Code	Participants
1	The "Charitable"	Middle Catholic Rural	MCR	8 participants henceforth known as MCR/a (Vice-Principal), MCR/b, MCR/c, MCR/d, MCR/e, MCR/f, MCR/g, MCR/h.
2	The "Forces Base"	Elementary Catholic Urban	ECU	6 participants henceforth known as ECU/a (Principal), ECU/b, EBU/c, EBU/d, EBUe, EBU/f.
3	The "Open Option"	Middle Public Urban	MPU	4 participants henceforth known as MPU/a (Principal), MPU/b, MPU/c, MPU/d
4	The "Lone Scholar"	Elementary Catholic Rural	ECR	5 participants henceforth known as ECR/a (Principal), ECR/b, ECR/c, ECR/d, ECR/e.
5	The "Gemini"	Elementary Public Rural	EPR	3 participants henceforth known as EPR/a (principal), EPR/b, EPR/b
6	The "Program Leaders"	Middle Catholic Urban	MCU	5 participants henceforth known as MCU/a (principal), MCU/b, MCU/c, MCU/d, MCU/e.
7	The "Retrospective"	JK-OAC Public Rural	JOPR	6 participants henceforth known as JOPR/a (principal), JOPR/b, JOPR/c, JOPR/d, JOPR/e, JOPR/f
8	The "Inner-city Innovators"	Elementary Public Urban	EPU	6 participants henceforth known as EPU/a (principal), EPU/b, EPU/c, EPU/d, EPU/e, EPU/f

School 1 - Middle Catholic School in a Rural Setting (The "Charitable")

For the past 60 years, a school has stood on or nearby this site to serve the Catholic population of this town of about 10,000 people and its agricultural hinterland. When the older elementary school was demolished in the late-1970s and a new one built, the local board decided to form a separate middle school for grades 7-8. Unable to finance a totally independent structure, however, the board attached it to the secondary school, which was being constructed at the time. This middle "school within a school" has since been run as a shadowy separate entity under the bailiwick of a vice-principal. Presently, the area designated for the 220 grade 7-8 students (with 12 teachers) dangles off the end of the main building (housing the 450 Grade 9-OAC students) like an appendix. While the two schools are generally segregated, there are some shared areas for convenience sake, such as the cafeteria, gymnasium, music room and chapel. Each teacher is assigned a homeroom class and given the responsibility to teach most subject areas (except for the specialized courses of French and Music). While teachers are given a timetable to follow, the vice-principal freely admits that because they keep the students for most of the day, they can freely spill one class into another if they wish.

The vice-principal (V-P) mentioned two notable items related to curriculum integration at the school. The first was an annual science fair that combined aspects of science, technology, mathematics and English (writing being included in the grading of the project). However, it had been tied to the Common Curriculum and had been cancelled that year with the advent of the new rigorous curriculum. Teacher MCR/c expressed regret at its demise in that it brought a sense of integrated realism to her teaching, but this was mixed with relief with not having to perform the onerous task of preparing for it again this year. Another project mentioned by the V-P was a charitable undertaking that had been spearheaded by the core French teacher (MCR/b). The teacher explained that she had been inspired by visiting missionaries to undertake a collection of shoes and soap to be sent to underprivileged countries. The students were put in charge of

collecting the items, calculating costs, writing letters, and so on during class time (MCR/b-1). The project had been so well received by the students that it spilled over into other classes, other teachers and even the school's pastor. A local newspaper had, in fact, picked it up and members of a local parish were now becoming involved as well.

School 2 - Elementary Catholic School in an Urban Setting (The "Forces Base")

This school, located near a Canadian Forces base, draws many of its students from families of military personnel. Opened in 1957, it originally consisted of three classrooms and approximately 100 students. By 1965, six open-concept pod classrooms were added onto the original structure. Most recently, several new classrooms, offices, a staffroom area, and a new gymnasium were added in 1993. While student numbers have tended to fluctuate greatly over the years depending on local economic circumstances, there would appear to have been an average enrollment of approximately 700 in the last decade. Teachers have formal staff meetings and divisional planning sessions (broken into Primary, Junior and Intermediate levels) every Tuesday after student dismissal, but these are more likely dedicated to behavior-review rather than curriculum issues. When teachers do deal with the curriculum, they admitted that it had more to do with how to cover the prescribed material rather than discussing any innovative techniques of its delivery (ECU/a-4). Like the previous school, most teachers are given the responsibility of teaching all subjects to one class of students (except French and Music). The one exception to this rule is teacher ECU/e, who teaches strictly mathematics to grades 4 to 8.

When asked, the principal stated that he did not consider himself an "active" curriculum leader in that he would not try to push any new educational techniques on his teachers. Rather he saw his job more "as one of being a supporter of the curriculum, but providing the opportunities upon which it can happen" (ECU/a-6). For him, leadership meant first ensuring that the Ministry expectations were being met and then providing a flexible enough framework to allow for

different teaching methods. This may include a certain amount of curriculum integration, or a more disciplinary approach depending on the learning style best suited for the students in the particular classroom. While he saw himself as a checkpoint to ensure that certain expectations are being fulfilled, he also believed that he should step in only when there was a grave threat of error. Teachers, to him, should be viewed as professionals and decisions about teaching style should be left almost totally up to the individual within their own classroom. His reasoning was:

> I mean, in the teaching profession you get paid a good salary. You are expected to be able to have some kind of problems-solving skills. You are expected to be able to do the job that is required of you, because you are trained well, and you are paid well. And that expectation is not outrageous - it's a good expectation, it's a healthy one. (ECU/a-12)

Most of the teachers who were interviewed appeared to follow along quite closely with this philosophy. While each said that s/he would occasionally turn to other teachers for advice, s/he kept sole control of any integration projects and tried them only within the confines of his or her own classroom (seen especially with teachers ECU/b, c, d and e). In fact, two of the teachers expressed a desire for a more formalized structure at the school to deal with resources (like a departmental structure with heads), claiming that the present system was too informal and vague (ECU/b-39, ECU/d-7). The one teacher who stood aside was ECU/f who had only just begun in this school the previous fall after a few years teaching in Japan. Having been used to extremely disciplined students who benefited from a student-centred approach, he tried to mirror this approach in his present situation through a great deal of group work. As well, in Japan, he had been exposed to team-teaching (which had been formally written into his contract) and felt that it could be a great improvement over a single-teacher approach at the school. Here, he tried switching classes once with another teacher. However, the result was disappointing for him - the other teacher complained to the principal that his students were too social and out of control (ECU/f-10). In turn, the principal reproached him (ECU/f-7), asking him to tone down the group work aspect and revert to a more disciplinary, transmission-style of teaching. This he did. After

this experience, he concluded that team-teaching, or extra-classroom integration was infeasible, and that any future experiments would be carried out in seclusion.

School 3 - Middle Public School in an Urban Setting (The "Open Option")

Opened in 1973 to cope with a population explosion in a suburb of Ottawa, this building was designed as a large open-concept school to accommodate 300 students. It contains a two-storey, multi-class space in the centre (now holding about 4 classes) and is shaped not unlike a Cathedral. Separated only by pillars and supports, several "classrooms" emanate from this central area to form niches relatively unprotected from the main action of student activity. This innovative experiment was initially lauded by the academic community and the media, who felt that it would benefit curriculum integration, group work, and cooperative learning. As more and more instances of student misbehaviour and teacher burn-out were reported, however, this form of school building quickly fell into disrepute. The increasing stress may also have been due to the overtaxing of the school's population - by the mid-1980s it had expanded to include over 600 students. By the early-1990s, large sections of the community condemned it as a relic of a bygone age and especially unsuitable for the intermediate level. The administration responded by reducing the student population down to 450 students, and adding walls to create specialty rooms (namely the library, music room, science lab, art and tech room). As well, two portable classrooms were recently attached at the back.

The incumbent principal, who had arrived the previous year, had felt the atmosphere was still rather poisonous due to teacher burn-out and a general antipathy towards the building. To deal with the problem he immediately terminated or transferred approximately fifty percent of the staff, leaving veterans who wished to remain. He then specifically hired teachers who had just graduated from teachers' college. He stated that their inexperience had led to a lot of sharing and diffusion of tension in the school "because of the new fresh air" (MPU/a-12).

The greatest irony in this situation is the fact that while the environment was set up for more interaction, classes were run on a rotary basis of 70-minute periods for the various subjects. As well, all teachers who were interviewed freely admitted that they vastly preferred the transmission approach of teaching over any other. Each stated that they engaged in some forms of curriculum integration, but saw it as something that should be teacher-directed and severely controlled. Teacher MPU/c (English and Social Studies), for instance, constantly wove the theme of "conflict" throughout the classes over the space of the year (MPU/c-12, 13), while teacher MPU/d (French) would include activities in her class that accentuated character development. Teacher MPU/b (Art) was the most passionately anti-integrative of those interviewed. She said she had been "forced" to combine music, drama, art, design and technology into one class under the Common Curriculum. After making many artificial connections and creating a huge balance sheet of blended outcomes, she came to the conclusion that this exercise had lead to nothing but mediocrity. In fact, she commented – "to me that was not integration. That was sheer madness. Because you couldn't do it in that time frame" (MPU/b-41). Presently, she said that she had decided to teach just one thing well and passionately – Visual Art (MPU/b-5). While students were allowed the leeway to pursue their own projects and activities, and given a certain amount of say over the direction of the course (she calls them "the barometer" [MPU/b-61]), ultimate control rested on her shoulders.

Both Teachers MPU/b and MPU/d stated that they had taught in the open area in the past. Both describe the experience as a form of purgatory (or paying their dues). They specifically referred to the high noise levels – Teacher /d, in fact, said it gave her a nervous disposition at the time (MPU/d-33). Teacher /b discussed how the situation kept her from doing many activities. She mentioned how she couldn't have debates, how distracting it was for the students who were trying to paint, and especially how she had to be continually considerate of other classes around her (MPU/b-54 to 56). Laughingly, she said that in earlier years she could roll with the punches

but she was too old for that now. All four participants at this school were quick to say that certain teachers did flourish in the open concept environment. The three teachers admitted, however, that the approach was not for them (MPU/b-53, MPU/c-53, MPU/d-33). All had moved on to walled classrooms, and the older teachers bluntly stated that they would quit before moving back into an open classroom (MPU/b-57, MPU/d-33). MPU/c has perhaps the most equanimity about the situation. When asked if she believed the concept to be beneficial or detrimental to integration, she simply answered that the school was what it was – it was neither bad nor good. While she agreed that it was noisy, she said that it was up to the teacher to adapt - the will to integrate comes from within the teacher, not from the built environment (MPU/c-51 to 53). The principal supported this premise. He stated that while the open concept could lead to more sharing between certain teachers, it can also have the reverse effect (MPU/a-11). Because some teachers feel like they are "standing naked in the middle of the street," they may tend to build up subconscious "wall of protection and defensiveness" (MPU/a-10).

As an interesting aside, one of the teachers mentioned, off the record, that the real reason why the open-concept was still maintained in the school had more to do with economic factors than philosophical premises. She said that when it was built, the open, barn-like structure meant that no air ducts were needed. To subdivide the school now meant hefty expenses or oxygen-free rooms. She felt that the board was just biding its time until it could afford repairs or replacement.

School 4 - Elementary Catholic School in a Rural Setting (The "Lone Scholar")

Located in a summer resort town along the St. Lawrence, this school had been built in the early 1960s as part of the Robarts building spree to deal with the baby boom of the time. Little has changed in this community since then and the school population has stayed stable at 400 students and 20 teachers evenly spread out over kindergarten to grade 8. Individual classrooms fan out from a central hallway to form a long, narrow school structure. Like the previous two

Catholic schools, teachers are assigned to handle all subject areas except French and Music. Unlike the others, however, most teachers have to manage split-grades (meaning they must teach students from both grades 7 and 8 in the same classroom at the same time). This had been a creation of the previous principal who had found that the integration of the two grade levels was tailor-made for the blended outcomes of the Common Curriculum. After running the school for over a decade and winning renown for her accomplishments, she was rewarded by being transferred to a bigger school in a more urban area. In return, a younger administrator from Toronto was parachuted into the position. When interviewed, she gave the impression that the board had hired her to do one specific job in regards to curriculum.[1] Her overwhelming concern was to implement the new "rigorous curriculum" created by the Harris government, while maintaining the split-grade system at the school. This was no mean feat as the new guidelines spelled out quite different expectations for the two grade levels.

When asked about integration in her school, she bluntly stated that she believed any modes beyond the nested approach to be creatures of an earlier, more carefree era. She, in fact, chastised the interview guide: "You're presenting this as if we have the luxury as educators to make these choices. We no longer have that" (ECR/a-5). She said that while she would personally love to try out certain integrative styles, she quickly added, "we have constraints" (ECR/a-6). In this new and "different world", students are under enormous pressure by the Ministry and by their parents to retain a number of skills so that they will succeed in high school (ECR/a-6). The school, she concluded, must be concerned with this rather than any student-centred innovations – maybe at some future date, but not now (ECR/a-7).

The four teachers interviewed appear to reflect the principal's sentiment. Teacher ECR/b, who had been teaching at the same school for over thirty years, considered himself a fairly

[1] This hunch has proven correct – since the interview this principal has been transferred to a larger school within the board's territory.

traditional "teacher-centred" educator (ECR/b-8). While he felt confident to teach any subject, he also believed in separating subjects into specific timeslots. He acknowledged that some spillover occasionally occurred between classes: if he saw, for instance, that more time was needed in history, he would extend it into a math class and then make up the shortfall at a later date (ECR/b-18). He always did this on an *ad hoc* basis as needed. The only time that subject lines should be blurred, in his opinion, was during special projects such as career days, field trips (ECR/b-17) or for the "Winter Wake Up" sports day (ECR/b-26). While he appeared the most rigid on this point, the other teachers echoed his sentiment. None felt uncomfortable with being generalists but kept subject areas separated, allowing only occasional lapses in their definite schedule (ECR/c-11, ECR/d-10). Teacher ECR/e went as far as saying that she kept a formal timetable in order to prepare students for high school (ECR/e-12). Rather than being concerned with any horizontal integration (across subject areas), the teachers presently seemed to be very concerned with vertically integrating the Ministry's expectations over the split grades. All admitted that this was a far greater challenge with the new guidelines than had ever been before. ECR/e was the only one able to create an integrated unit joining the two levels, on the theme of mountains. She admitted that this was a rarity, however, and only achieved with difficulty by stretching the expectations into unusual shapes (ECR/e-1, 8). Inevitably, all teachers liken integration to a luxury that should only be approached tentatively, on certain occasions (ECR/d-3, ECR/e-8). Teacher ECR/c, in fact, denounced what he saw as the more in depth forms of integration (like themes) as being artificial and university-based rather than founded in reality (ECR/e-1).

Lastly, because each teacher had his or her own class of students, there appeared to be very little formal interaction between staff members within the school, let alone the division. This was compensated by a great deal of informal planning and sharing between teachers (ECR/c-32, ECR/d-8). Suggestions were meted out in the teacher's lounge or on the drive home.

However, the culture of the school seemed to reinforce a belief in the "lone scholar". The two exceptions to this were during the planning of special events, like school masses, or at the end of year, where teachers of one grade met and discussed student levels and behaviour with teachers of the next (ECR/e-10).

School 5 - Elementary Public School in a Rural Setting (The "Gemini")

This school, located on the outskirts of a small village, serves a far-reaching community of local agricultural and manufacturing workers. A one-room village schoolhouse had originally occupied the site. After several additions, it was torn down in the 1960s to be replaced by a brick-clad, L-shaped structure, presently housing 300 JK-8 students. The principal and two teachers (the school's only grade 7 and grade 8 teachers) who were interviewed all corroborated the same story of the school's recent curriculum history. In the early 1990s, the principal of the time received a certain amount of funding from the board to experiment with the implementation of the new Common Curriculum. To encourage the teaching of integrated units recommended by the guideline and board level consultants, he scheduled Teachers EPR/b and EPR/c to have several free periods together per week (EPR/a-1). As such, the two did a lot of joint planning – throughout the summer on their own as well as on paid time. They stated that they would dream up thematic units based on perceived student interest, and then "weave in" various outcomes, delegating some to the grade 7 teacher, others to grade 8. At the end of the year they would then pass along a list of the accomplished outcomes to the high school, grade 9 teacher.

Creating such themes as "the Victorian Unit", "Ancient Greece", and "Mysterious Phenomena", the teachers agreed that it had gotten to the point that students didn't know what discipline they were studying – and they didn't care. What was important was just "the project" (EPR/b-2). The two teachers said that over this period they had developed a bond as educational partners – a team that supported each other with empathy and an incredible amount of ideas.

However, in the last year, all three interviewees maintained that this whole configuration had changed to end this form of curriculum integration at the school. With the advent of the new, rigorous curriculum, expectations were now based on a grade-specific agenda. As such, the cross-level themes became unfeasible and the team teaching ended. At the same time, board and Ministry level funding dried up and the new principal began to find it very difficult to book joint planning time for the teachers. She herself admitted that this represented a retreat for curriculum innovation and for integration in particular (EPR/a-1 to 2).

While there was a general sadness among the three women as a result of the changes – they were also quite pragmatic. Subject areas (EPR/c-1) once again replaced "projects", and inflexible, context-specific content subsumed the more lax outcomes of the previous curriculum (EPR/c-2, 6). However, while Teacher EPR/c complained that the "boring old" fur trade did not grab the students' attention like UFOs, she admitted that the new curriculum gave her a feeling of greater security. The Common Curriculum had been great fun, but it had also meant a pile of extra work, and the constant nagging feeling that she was a charlatan for using it. The thematic approach had been one aspect that worked well. But taken overall, she openly discussed her disdain for the previous document. Primarily, she felt that certain fundamental chunks of information had been missing from the guideline, while other outcomes that she considered luxuries were included (EPR/c-6, 38). She then confessed that she was actually relieved when the new guidelines were introduced because they made her feel more accountable to parents and part of a provincially standardized system (EPR/c-29, 30).

School 6 - Middle Catholic School in an Urban Setting (The "Program Leaders")

This school, located in a densely populated suburb of Ottawa was created in the mid-1980s to deal with a rapid change in demographics. Constructed in a maze of corridors and twisting hallways meeting in off-angles on several floors, the building is presently taxed to its capacity of over 750 students and 40 teachers. Unlike the other Catholic schools in this study, teachers are viewed as subject specialist and classes are organized around a rotary system. When asked about forms of integration in the school, the principal immediately pointed out the "exploratory programs". This consisted of an "Integrated Arts" program (Music, Art and drama), a "Design and Technology" program (computers, machinery and woodworking), Family Studies, and Physical Education (sports, dance and health), taught over a 2-year period (15A-3). On closer questioning, he admitted that rather than "fused", the integrated studies were split into various isolated components. A student taking Integrated Arts, for example, would first take a Music class for two-thirds of a school year, then the Art, then the drama.

The four teachers selected by the principal to be interviewed all held the position of "program leader" for the various subject areas at the school. As "leaders of servitude" (MCU/c-2), their responsibility was to act as liaison between the board and the subject teachers, to inform them of curriculum updates, to give aid where needed and to bring complaints and comments back to the board office (MCU/d-12). Beyond this pluridisciplinary approach, there were few other formal methods of integration actively used throughout the school beyond the classroom level. None made the claim that they engaged in any team projects (MCU/c-22) or formal planning meetings on curriculum (MCU/b-18). Rather, they all seemed to see themselves as autonomous professionals when it came to handling their class. Teacher MCU/c, who represented the English program, most explicitly expressed this sentiment (25). However, they did state that this lack of formal collaboration was more than compensated for by informal

gatherings of teachers and sharing of resources (MCU/b-21, MCU/c-9, MCU/d-12, 33, MCU/e-14).

The projects that were undertaken were almost solely the product of individual initiative. The teacher representing Social Studies said that she felt that not enough was being done to promote multiculturalism within the school, so she took it upon herself to have the students prepare and run an international day. The work for this was fitted into various subjects and the principal gave a certain day for activities to take place (MCU/b-1, 2). Teacher MCU/d (representing French) also stated that she frequently engaged students in theme-work that she had a personal interest in (MCU/d-1). While teacher MCU/e (representing science) said that she may bring geographical issues into her lab-work, and include artwork in religion for interest sake (MCU/e-6), she added that she remained a traditional teacher. She rarely went outside the framework set by Ministry guidelines and avoided stepping on other subject-teachers' toes (MCU/e-24). In fact, she commended the present guidelines as superior to the Common Curriculum for its ability to remove "the guesswork with other teachers" (MCU/e-19, 20).

School 7 - JK-OAC Public School in a Rural Setting (The "Retrospective")

This school was originally part of a planned community - one of the many created between 1948 and 1952 to relocate inhabitants of towns flooded by the creation of the Saint Lawrence Seaway. At first, the elementary and secondary schools stood side by side as separate entities until 1972 when they were joined by a connecting corridor to create an extremely long, hybrid structure. It now houses just over 300 students and 20 teachers, approximately the same number as when the two schools were founded. The Principal, who had held the position for just over 5 years said that this was not the only facet of the school that had remained the same. She said that the entire community was quite a culturally homogeneous group of people who, from her perspective, had changed little in morality from the mid-1950s (JOPR/a-5).

Almost immediately into the interview, the principal expressed a great desire to see curriculum integration as an integral aspect of education rather than as a "project" performed on a special occasion for promotional purposes (JOPR/a-2). However, she admitted that this was a bit of a pipe dream in the present situation. Because of the firmly entrenched rotational system and the local culture that believed in subject specialization for teachers at the Intermediate level, a disciplinary education system was inevitable (JOPR/a-26). Most of the teachers interviewed agreed with the principal, mentioning that these two aspects hamstrung any integration methods they might think of undertaking - not much could be accomplished in one period a day (JOPR/b-1, JOPR/c-26, JOPR/f-22, 23). Teacher /b (French) said that she had been quite inventive in the past but that because of the school organization and culture, she was quite fearful to tread on toes of other subject teachers (JOPR/b-23, 32). As such, she dolefully described herself as "an island" in this teaching post (JOPR/b-34). The other teachers were less fatalistic, and seemed to engage in more informal meetings with one another (JOPR/d-9). The Gym and Tech teacher went as far as says that he once "traded off" a certain "scientifically-centred" unit to a more scientifically inclined colleague in exchange for a tech-centred unit with another class (JOPR/c-17). Otherwise, he did agree that he had little other connections with teachers (JOPR/c-8).

The Social Studies teacher gave a great deal of insight into a failed integration experiment at the school. She related how in the early 90s the previous principal had mandated the use of group work throughout the school, based on suggestions by the Common Curriculum. He had the rows of desks removed and replaced with permanently fixed work-stations accommodating four students at a time. Students were to be graded as a group and marked for team effort. When the social science teacher was hired five years previously, she related that the classes she stepped into were in a state of chaos - "it was horrific, absolutely horrific" (JOPR/e-12). She said that nothing was being done - one student would do all the work while the other three did little more than socialize (JOPR/e-11). With help from the new principal, her first mission was to have all the

island seating removed from her classroom and the rows brought back in. Taking an almost apologetic tone in her voice, she said "then we were back to where we could get some order and discipline and so on – so we could actually impart knowledge. That sounds like we were feeding them with spoons – but we were" (JOPR/e-13). Her reasoning was that they had to learn something and make up for lost time. At present, she said that she did take out time for the occasional project, but that they amounted to no more than three weeks of the year - as special events (JOPR/e-12). For example, she did a section on Mexico in geography, and on one day they had a small party with Mexican food (JOPR/e-2). Otherwise, she keeps the subjects separated for efficiency sake (JOPR/e-21, 22).

The one big event of the year that every teacher mentioned was "The Seaway Project" - a weeklong unit dedicated to help students research their local history (in celebration of the fiftieth anniversary of the creation of the town). Three grades, 7, 8, and 9 are given the task of looking at what the landscape and society looked like before, during and after the creation of the St. Lawrence seaway in the late 1940s (JOPR/e-12). One teacher mentioned that this was the one time that students were given the freedom to research at their leisure, to dictate the direction of the project and for teachers to relinquish most of the power in the classroom (JOPR/f-27).

School 8 - Elementary Public School in an Urban Setting (Inner-City Innovators)

Located in the core of Ottawa's downtown area, this school is essentially a three-storey box surrounded by asphalt parking lots and storefronts. With a student body of 400, almost every continent in the world is represented. The principal proudly boasted of the strength that this cultural diversity had brought to the educational process at the school. She was also very enthusiastic about the innovative teaching techniques employed by the Intermediate level teachers, specifically pointing to the "Integrated Studies Program" or IS (17A-1). The history of this ongoing experiment was related by Teacher EPU/f who had been its creator almost a decade

previously. He said that in the very early 90s, under the Transition Years, he was given a small class of exceptionally bright students who were uninspired by the three separate subjects he was teaching them (English, History and Geography). Having been himself interested in the Arctic, he decided to combine all three subjects together for one week as an integrated unit (or "fused" to be more specific). He showed them a film of the North, brought in its history and had them read a Jack London story. It was so popular that the next year it had evolved into a six-week unit (EPU/f-1). At the time, he said he was lucky enough to have very innovative colleagues. Between the three of them they devised a program around the three subjects composed entirely of thematic units (except for the first month where the ground rules are established [EPU/f-3]). The principal, who described by EPU/f as a genius at arranging schedules, create a formalized Integrated Studies Program for all the English/Social Studies teachers at the Intermediate level and it has remained in this configuration ever since (EPU/f-30). Each day, the IS teacher was given 3 periods - an isolated 40-minute "planning" time and a more substantial 80-minute block to do a major activity (EPU/a-3, EPU/c-2). For this particular teacher, every unit contained a book, a video, manual work (making dioramas, for example) and hopefully some form of field trip. Over the years, the themes have ranged from "the trial of Louis Riel" (EPU/a-1), to a pioneer school, and a "shopping mall" (EPU/a-2). One of the units, on the stock market, won such fame that it was showcased by the board and had been adopted by half the schools under its jurisdiction (EPU/f-30, 32).

Almost every other teacher interviewed at the school had been influenced by this experiment. Teacher EPU/c was perhaps the closest in spirit to EPU/f (the unrivaled IS guru at the school). She said that she had done a lot of substitution work for him over the years and had been impressed and inspired by his approach (EPU/c-22). When she was offered a full time position at the school the previous year, she said that she had jumped at the chance. Her only regret at the present time was that she had a bit of trouble doing total fusion of the three subjects

at all times. English and History were no problem, but Geography was the monkey wrench in the works (EPU/c-1, 5). Still, she looked to him as a mentor and felt that after a few years she would overcome these problems.

Teachers EPU/b and EPU/d, who taught Integrated Studies programs consisting of French, History and Geography, were less concerned with a complete bonding of the three subjects. Because of the level of language ability, the teachers tended to teach History in French during the first semester, then Geography in French during the second – never all three at one time. Otherwise, they said, it would become too difficult and vague (EPU/b-19, EPU/d-3, 13). While no team teaching endeavours were undertaken, all the teachers mentioned that they would occasionally coordinate field trips together (EPU/c-14, EPU/d-3, 16).

EPU/e, the school's ESL specialist, independently came to many of the same conclusions regarding a fused curriculum that EPU/f had come to a decade earlier. However, she has pursued them in relative informality. She found that that her foreign students were bored by the "Mickey Mouse" material she was mandated to teach by the board, so she took it upon herself to integrate a great deal of history into her class for interest sake (EPU/e-1, 2). Not formally an IS class, she ran it along the same lines but under her own initiative (EPU/e-3) doing any period of history she liked (EPU/e-5, 6). The students took an especial liking for historical novels - so that was the direction she was presently taking (EPU/e-19). Most recently, she had come in line closer to the IS teachers - she did a "quick and dirty" version of the "pioneer school" unit at the same time as EPU/f's class was engaged in it. However, she admitted that this was done simply because her students were going on an end-of-unit field trip with EPU/f's class to Upper Canada Village and she wanted to bring them up to speed so it wouldn't be a waste of their time (EPU/e-22).

Analysis of Dimension A: Elements used during Integration (by Sub-dimension)

Content

For the majority of participants surveyed, Content did not play an important role as a building block for integration or in the education process in general. In fact, 3 administrators and 4 teachers (representing 16.3% of the survey) made no mention of content or content integration at all when asked about the elements in Dimension A. While an overwhelming number did acknowledge that a certain amount of information should be included, they appeared to grimly accept it more as an evil necessity than anything else (51.2% stated that content was a low priority, 27.9% said it was a secondary priority). A prevalent fear among teachers was that the teaching of content could too easily degenerate into rote learning and the memorization of minutiae. This representative sample indicated as much:

> Obviously, if they are going to memorize when Jacques Cartier was born and died - how is that going to help them? (MCR/e-7)

> They used to give you so much information, you digested it all, then (excuse my expression) brought it all up on an exam. A month later you forgot it all. Well, where is the skill? And that's what the question of all our generation of rote, rote, rote, knowledge, knowledge, knowledge - you know, kids have brains like sponges. Feed it in, it will stay. We only remember a quarter of what was fed in if it was a bit of hands on, or some skill was used with it. It does not stay if it is just knowledge poured in. (MPU/d-5)

> I don't want them to have more information. That is not the point of education, is it? (MPU/b-48)

A number of participants mentioned the various approaches they had used to overcome the problem of teaching disembodied bits of trivia. Primarily, they used content as steppingstones, the facts being less important than the honing of memorization skills (MCR/c-1, MCR/e-7, ECU/c-2, MPU/d-4, ECR/e-7). Teacher JOPR/f (the only one to rate content highly) was quite emphatic about this approach. He taught a computer class and brought in much information from mathematics and geography to use as filler for spreadsheets and databases (JOPR/f-2). In most instances, teachers who worked with content endeavored to weave information into the greater

meaning of what was being taught (MCR/c-1, MCR/e-7, MCR/g-2, ECU/c-2). This was done by drawing logical connections between other subject areas (MCR/d-4, ECU/b-2, MCU/c-1), subjugating content to various projects (MPU/c-3, MCU/d-10), and by reinforcing it from class to class (ECU/e-1, MPU/a-3, ECR/d-2, JOPR/d-2).

Many participants expressed a concern that the importance of content had been artificially inflated with the introduction of the new curriculum guidelines. Displaying especial alarm, five administrators remarked that this turn of events had placed an undue stress on the education system and had been detrimental for other elements (MCR/a-16, MPU/a-17, ECR/a-1, EPR/a-4, JOPR/a-6). Generally, the teachers concerned with increased content felt more fatalistic about the situation. Most considered it just another transition from the Ministry that they would adapt to over the next year. The only anxiety that they attached to the presence of new information was being able to "cover it" in the short term (MCR/b-10, MCR/h-36, ECU/d-4, ECR/c-3). Teacher JOPR/b stated that she actually disliked the present curriculum because it encouraged the passive transmission of knowledge, allowing students to become "lazy learners":

> I'm giving lots of content, because the way the curriculum is laid out - and, I really don't feel comfortable with that. When I teach history, I try to bring the kids out by saying, "what do you think?" One time, I said, " if you don't start talking, I'm going to put everything on transparencies, and that's it - we won't do anything." You know what they said - "that's a good idea, Madame!" ... They want content, content, content. (JOPR/b-12)

Inevitably, content becomes a double-edged sword for teachers. While some is required, too much can stultify the educational process. Teacher MPU/d explained the position most eloquently:

> Of course, without content completely you have a drum - when you hit it, it's empty. ... So you do have to have some kind of depth behind the skill, and the depth would be the content and knowledge that you require. But knowledge by itself doesn't really necessarily give you the skills you need. You're just giving somebody a book and saying, "here - read it." (MPU/d-6)

Academic Skills

Rated uniformly higher than any other element in Dimension A, the integration of certain Academic Skills were mentioned by all participants in this study except for four administrators (who, in fact, made little mention of any of the elements). While there were some variations in the importance that teachers attached to this element, the majority either felt that academic skills were of a high (58.1%) or middling (27.9%) priority. The only real fringe respondents in the study were teachers MCR/b and JOPR/d (who both taught core French). Each stated the same complaint – they felt that other academic skills were important, but because of the low level of student language competence they had to concentrate solely on the study of French while in the designated class (MCR/b-8, JOPR/d-1, 2). Other teachers, while being quite enthusiastic about the importance of this element, referred to it in nothing more than generic terms and broadly stated that it should be "woven" throughout the curriculum (MCR/c-1, MPU/d-4 to 6, ECR/c-2 to 3, ECR/e-2, 7, MCU/c-3, 7, JOPR/e-5). The remaining participants (31 in total) tended to define the term as *Language skills, Mathematical and Scientific skills, Computer skills or General Research skills.*

1. Language across the Curriculum

The top priority for 90% of the 31 teachers surveyed was the reinforcement of language throughout the curriculum – in whatever course they were teaching. Schools 1, 2, 3 and 8 were especially uniform in their desire to see an informal school-wide "Language across the Curriculum" policy. This ranged from a brief mention by some (MCR/d-2, MCR/f-3, MCR/h-3, ECU/d-1, ECU/e-3, ECU/e-11, ECU/f-5), to a more in depth discussion by others who said they had made this one of their central goals of education (MCR/e-1, 5, 20, 21, 22, ECU/b-3, 7, 14, ECU/c-3). Almost all participants remarked, at least once, that they consistently marked all projects and presentations for spelling, grammar, and sentence structure throughout the day. This was done to reinforce to the students the importance of proper spelling no matter what they were

doing. Many teachers believed language to be a process, rather than an object of study, thereby rendering it impossible to separate from the other subject areas. The participants from school 3 ("Open Option") were quite clear on this point:

> The way we communicate emotional development is through language - either through body language or through verbal language - and teachers have just plugged right into that and seen the relationship and therefore that is the curriculum integration approach there. Now, what I find is that teachers are almost doing it intuitively and not so much consciously. (MPU/a-1)
>
> I'm always looking, I think, towards the end goal that I have. This end goal is for independent thinking, for them to become good problem solvers and to have that confidence that they are capable of doing it. They can't do it unless they have developed some very important [language] skills. (MPU/b-12)
>
> I don't think you can teach any subject without integrating language skills. ... I've even done grammar lessons based on what we've read in history. We did a lot on similes in language early on. We were reading some history documents that had a lot of similes, so the kids would say "oh, here's a simile! They're talking about the bullets being like lightning from the sky. Oh, yeah - we learnt about that in English. That's comparing this and this." (MPU/c-5)

School 8 ("Inner-City Innovators") went as far as formalizing this belief at the school-level through the creation of an Integrated Studies programme. Outside of the first month where the grammar rules were explained to the students, Social Studies projects became the objects of study (EPU/b-2, 4, EPU/d-8, EPU/f-19, 39, 40). Language became more of an underlying tool to be used by the student at each stage, but formally discussed only when necessary. This "Language as Vehicle" approach was also used extensively by the ESL and French Immersion teachers. The ones that were interviewed said that they spent much of their time looking at other subjects and only used language as a medium to communicate points being made. That way, the students were put more at ease about their shortcomings in language and naturally learned how to speak and write (MCR/g-1, 2, MCU/b-3, 4, MCU/d-1, 2, 4, 10, 25, JOPR/b-1). Teacher EPU/e went as far as informally centering her whole class on the study of ancient history even though there was no such mandate from the Ministry or the school. She did this simply to create filler and interest for ESL students (EPU/e-7).

Some of the teachers interviewed took a more pragmatic reasoning to the integration of language in other subjects. They stated that this allowed them to double up on marking (such as correcting spelling in a Science Project) and fulfill 2 Ministry expectations with one activity, thereby saving themselves time (MCR/c-4, ECR/b-2, ECR/d-3, EPR/b-14, 15, MCU/e-4, MCU/e-5, JOPR/a-7).

2. Problem solving and research skills

Of the 31 participants, 14 (45.2%) explicitly stated that they had tried to aid the development of students' problem solving and research skills. All 14 felt that these skills should not be segregated to just one specific subject area, but that they should be treated more generically and transferred across the curriculum. Like Language skills, this was seen as fairly endemic in schools 1, 3 and 8. They differed slightly in approach, however. School 1 ("Charitable") appeared to lean more to problem solving skills – the teachers highly praised the ability to learn general thinking skills and then being able to apply them to subject areas or various situations (MCR/d-2, 4, MCR/f-1, 2, MCR/g-1, 5, MCR/h-3). The participants in school 3 ("Open Option") were less enthusiastic about elements outside of their area of concentration like Art or Language. However, each mentioned that they had tried to teach the students "research skills" (MPU/b-5, 14, MPU/d-6). This was also referred to in school 8 ("Inner-City Innovators"), where teachers put great emphasis on the ability to research the thematic projects independently as part of the programme (EPU/b-4, EPU/c-7, EPU/d-8, EPU/f-19, 39, 40). In other schools, the promotion of these skills seemed to have been based on the teacher's own initiative (ECR/b-2, MCU/d-4, 10, 25, JOPR/b-5, 7).

3. Mathematical and scientific skills

A few teachers (12 of the 31 or 38.7%) were drawn to mathematical skills as having a great ability to transfer across the curriculum and apply to many situations. This willingness to integrate this facet seems to have been dependent largely on the individual preferences of the

teachers and their predilection for math/science (10 of the 12 had taken this specialized subject at teachers' college). At school 1 ("Charitable"), it also seemed to be part of the teacher culture.

While the teachers do mention that math skills could be informally placed in several divergent subjects, most gravitated to a "natural melding" of mathematics and science experiments (MCR/c-4, MCR/e-1, MCR/f-3, 4, 7, MCR/h-3, 4, ECU/b-3, MCU/e-4). Two teachers (MCR/g and ECR/d) mentioned that Mathematical skills could be applied to art and sewing classes (MCR/g-1), while one teacher said she had used a project on Hockey in English literature to introduce aspects of science and technology (ECU/b-14). Teacher ECR/d was especially struck on mathematics and felt that it could be fitted in almost anywhere in the curriculum:

> We talk about how important the basic skills are and that you need to know those basic skills to do your science projects, and you need to do them for art when you're doing measurement or figuring out how much material you need. In health we talk about nutrition a lot - so we use the basic skills again in math. ... I try to make sure that they match up. When I'm doing measurement in math, I make sure in science we're doing something that's going to involve like experiments that will involve some type of measurement, so they can see that it's carried over in both. (ECR/d-3)

Others tried to draw correlations between math and geography (JOPR/a-1, EPU/f-3) but mention this only informally. Teacher ECU/e, with almost a guilty tone, admitted that he will ask the students who take French Immersion certain geography questions in Math class to see if they have been taught all the information and skills they needed. If they could not answer, he would insert these skills into his own class to make up for the shortfall (ECU/e-3). Lastly, Teacher JOPR/c, who had received his joint teaching degree in Technology and Physical Education, said he did his best to combine the two. He confessed that he found it difficult due to the school's rigid rotary environment:

> I try to incorporate phys.ed. in as much as possible. When I do my math and science, I have incorporated some physical activities into the science, bring them on nature walks and things like that. I haven't got into it as much this year as I have in the past - getting them up and moving – "if you put this group over here and this group over

> here, and if he runs there and back, and it takes him 30 seconds, how long will it take him to run twice as far" - and actually see how long it takes (JOPR/c-1).

4. Computers

A small number of participants (7 of the 31 or 22.6%) stated that they had tried to integrate computers into the classroom. In school 1 ("Charitable"), the teachers appeared to use the computer at a low level - as a word processor to write letters, reports or a special project in technology (MCR/b-11, MCR/d-4, MCR/e-2, MCR/f-3). The administrator of school 7 ("Retrospective") was more energetic in her promotion of computers as the Ministry had recently supplied them with a great deal of funding earmarked especially for this area (JOPR/a-1, 7). Teacher JOPR/f supported this - he said that because some classrooms were now equipped with one computer per student, the class could get beyond the strictly academic study of the PC. Rather, he now felt that it could be used as an educational tool, like any other writing device (JOPR/f-3). In school 8 ("Inner-City"), teacher EPU/c seemed to combine most of the aforementioned skills into one project:

> We did an Internet activity as part of the unit. It was definitely an integrated unit because they were on the Internet on a site called the Museum of New France and we had to do research. So, it was research skills and they're learning about using the Internet, but also the end product was they had to write a journal from the point of view of a child immigrating to New France in the 1600's. So, they were using writing skills and reading information on the Internet, and they were doing research. (EPU/c-7)

One of three conclusions can be gathered from the low participant response in this area. Either most teachers eschewed the use of computers in their classroom (or could not get access), or that the computer was so prevalent in the classroom, it was not worth mentioning. A final conclusion could also be that the teachers just did not relate computers to curriculum integration.

Overall

While substantially more proof would be needed to make any valid explanations of the results of this section, it may be suggested that Language-Across-the-Curriculum (and problem solving/research skills to a lesser extent) has become engrained in many elementary teachers as a universal responsibility (perhaps due to generations of reinforcement). Mathematical and Computers skills, however, seem to be viewed by the majority of teachers as being of a more specialized nature. School 1 ("Charitable") is, in fact, the only site that whole-heartedly supported all of the facets of academic skills. The rest of the schools were more scattered in their opinions and little difference existed between the variations of urban/rural, separate/public or elementary/middle (as shown below in figure 11.2).

Figure 11.2 - Teachers Using Academic Skills Across the Curriculum

School	Language	Problem-Solving	Mathematics	Computers
1. "Charitable"	7 / 8	4 / 8	5 / 8	3 / 8
2. "Forces Base"	5 / 6	1 / 6	2 / 6	0 / 6
3. "Open Option"	3 / 4	3 / 4	0 / 4	0 / 4
4. "Lone Scholar"	2 / 5	1 / 5	1 / 5	0 / 5
5. "Gemini"	1/ 3	0 / 3	0 / 3	0 / 3
6. "Program Leaders"	3 / 5	1 / 5	1 / 5	0 / 5
7. "Retrospective"	3 / 6	1 / 6	2 / 6	3 / 6
8. "Inner-City Innovators"	4 / 6	4 / 6	1 / 6	1 / 6
Total number of teachers	28 / 43	15 / 43	11 / 43	7 / 43

Practical/Manual Skills

While there was much more variation among teachers' opinions in regards to Practical/Manual skills, this element was mentioned as having some importance by all participants (ignoring the 3 administrators MCR/a, ECU/a and MCU/a previously mentioned). Ranked by 7 (16.3%) as low, by 17 (39.5%) as secondary, and by 16 (37.2%) as a high priority, participants equated three things with this element: Relevance, Life Skills, and Hands-On activities.

Relevance

An overwhelming majority of participants (35 or 81.4%) made at least some mention of the importance of including relevant points to the curriculum. "Relevance", of course, took different forms depending on the respondent's angle. Several related it to student interest - they said that they had been through the school system themselves, had studied the curriculum, and knew how boring education could be (MCR/e-6, EPU/e-4). They therefore said that one of the things they wanted to do with each unit was to make some outstanding splash that would get the students' attention and help motivate them to keep going (no matter how unrelated it was to the work at hand). Without some shock or immediate connection, teachers explained, a subject would not stick (MCR/c-1, MCR/h-11, MCR/g-3, 5, JOPR/a-1). Teacher MCR/b explained that:

> They like music. It doesn't matter if they hate French, they like music and somehow that brings them on board. [a spoon full of sugar?] Yes, that's right! You have to go at it positively and they will take it. It is like coming in the back door. (MCR/b-17)

Of all other participants, Principal MPU/a had the biggest touch of the educational showman in him. He felt that it was the teacher's job to "make the academic components perhaps a little more relevant, a little more exciting, a little more pizzazzy so that they do connect with the mind set of the young person, adolescent." (MPU/a-5). He illustrated this remark by describing a field trip that the students took to citizen court. He said that rather than just turning to a dry textbook, the students could see the ceremony, feel the patriotism and emotion of the experience of becoming a new member of a country. He maintained that this "would certainly make history more relevant, and what they do then is that they go back to that page 73 and read it with more vigour and enthusiasm" (MPU/a-5).

Many teachers tried different ways to help the students relate to the abstract knowledge mandated by the guidelines, usually by including practical applications. Primarily, they commented that they would always include a number of realistic examples when dealing with science (MCU/e-9, 10) mathematics (ECU/e-5, ECR/d-4) or the past (JOPR/d-2, 4, JOPR/e-8,

JOPR/f-5, 6). These examples were, in most cases, taken from the teacher's observations of contemporary political, economic or popular events that were going on beyond the school doors (MCR/d-6, 7, MPU/c-1, 16, 22, ECR/b-2, 3, 4, JOPR/b-9, 40, EPU/b-6, EPU/c-9, EPU/d-7, 11). Some teachers stated that they went further than trying to relate the "larger independent world" to the student. Rather, they tried to get into the adolescent mind-set and build a bridge outward in an effort to meet the curriculum expectations in a meaningful way. Teacher JOPR/b, for example studied contemporary music (MCU/b-6) and tried to relate it to the religion class she was teaching:

> The kids got to do a rap where they included the Ten Commandments. This was a big huge deal, and it took hours because they had to write the rap and they had to work together with their group to present the rap. And it's stressing - I mean, they learned more about the Ten Commandments than they ever would have from just having to sit and memorize them. (MCU/b-8)

Some teachers felt it was most effective to simply talk to the students for periods of time about their lives, or bring in personal experiences to help the students relate (ECU/c-4, ECR/e-3, 7). Teacher MPU/b, in fact, threw away the curriculum for a period of time to discuss only the topics that the students wanted to look at:

> If they become curious about something, it's easy to get me off track in the class. They know that and I think it's great, it's great. For instance, in history - unfortunately I still find Canadian history fairly dry... well, really dry. ... I'm with a class that's very sort of "throw me the ball and I'll catch it", where as last year it was "don't throw me the ball - I'm not even going to catch it- make me. Like, lady, teach me if you can". ... So, we got into things like Auschwitz. We got into human rights issues. We got into all kinds of things. Well, somebody may say "well, that's got nothing to do with the history curriculum". In essence, it did. It has much to do with it. (MPU/b-14)

A few of the teachers were quite blunt about the difficulty they had experienced when trying to find relevant material. Bemoaning the fact that it was difficult to compete with the world of Nintendo (ECU/b-4, 7) and TV (ECU/f-6), they said that no matter what they introduced it was immediately branded by the students as out-of-date. Teacher JOPR/b went as far as saying

that when she began to discuss personal experiences or things other than traditional schoolwork the students would accuse her of "babbling" (JOPR/b-2).

Life Skills

A fairly small amount of participants (9 or 20.9%) indicated that they tried to introduce "Life Skills" – those everyday, practical skills that they thought would help the students in the "real world". Teacher MCR/b, for example, tied this to the charity work she was having her students engage in:

> During lent, the kids have had bake sales. I guess that is another aspect of integration. The kids organize the project - they've got to plan it. Someone's got to run with a table, they've got to make a sign. This aspect I have nothing to do with it. I am basically there as a supervisor to say "okay, you've got to do that". We've had bake sales, we've had kids making ginger-bread houses. They raffled items off. And all of that money goes toward their class goal for the month. That's an education for me - to watch the kids organize a bake sale. There has to be a lot of give and take and sometimes the guys don't have a clue what they're doing and the girls are telling them what to do - it's "life skills". (MCR/b-9)

Other teachers seem to echo this approach. They mention such things as "real life math" or "functioning skills" (MCR/d-2, MPU/c-13, ECR/c-20), "everyday skills" (MCR/h-3), applications (MCR/h-5), or something you can "use down the road" (MCR/g-3). One teacher went as far as saying that real world skills were the fountainhead for all others that students will learn (JOPR/e-5, 6). These were all kept in a fairly general, rudimentary state of development, however. Students were not really expected to be prepared for "real life" or to be specialized in any vocational skill just yet (this would be left for Grade12 and OAC). Rather, activities took broader forms such as "business sense" (ECR/c-1, 4), or internet projects (EPU/b-3). A couple of teachers did go as far as organizing career days – but this was more to enhance the relevance of education for the students and to vary the learning activities than to try to help them choose an employment path:

> Take last weeks event. We had spent about two weeks organizing a career day. We brought in people from all fields to talk to these guys, and then we turned that into a writing assignment. We turn it into history, because we were able to find the roots of these different careers. We turned it into math, because we were able to figure out dollars and cents to teach them what they'd make. So, something as minute as getting eight people talking on a career day, we turned that into three areas of the curriculum. So I think real life experiences is probably the most important, because I think kids are very intelligent, and they are visual learners. (ECU/f-6)

Hands On

20 participants (45.5%) mentioned that they had used "hands-on" projects in their classroom. In most cases, these projects had taken the form of sculptures, diorama, models posters and gardens. The reasons for engaging in these forms of artistic expression outside of the art class varied greatly from teacher to teacher. Some felt it was a way of keeping student interest in schoolwork. Others felt it gave additional development to their manual skills (MCR/g-3, 5, JOPR/d-3, EPU/a-9, EPU/c-8, EPU/f-1, 18). Some teachers admitted to being quite discriminate. They said that they would assign more manual work to classes they thought of as slow (MCU/d-16). Teacher MCU/b stated:

> That's me - because it is a fairly low-level group. So say, for native studies - they would write a legend and we did the printmaking, and then we made a calendar with their prints. So, I do a lot of hands-on. In the seignorial system, they'll do a model of the seignorial system. (MCU/b-5)

Certain subjects seem to come to the fore as being naturally amenable to manual work. Artistic endeavour and science projects seemed to go hand in hand, for instance (MCR/c-16, MCU/e-4, 6, MCU/e-7). Strangely enough, Art was used especially in the separate schools as part of the religion class. Teachers explained that this made the class more interesting and gave the teachers something concrete to mark (MCR/e-20, ECU/f-1, 4, 14). As teacher MCU/e explains:

> I always say to the kids "I'm not marking you as an artist. I'm not an artist, you're not an artist. I'm marking you on your effort. I'm marking you on your neatness. I'm marking you on completeness." But the art aspect is still there. It is included in. There is a lot of art integrated in religion, too - if I want to cross over. I teach religion and a lot of their religion projects, basically, are art-type projects, you know. They may be doing an acrostic, but it has to be coloured, and maybe decorated. So, there is a lot of art integrated into that area. (MCU/e-5)

A few teachers stood in directly opposite camps in regards to hands-on activities. Teacher JOPR/c (physical education) made a convincing argument that the grade 7 & 8 level was the perfect time for students to learn physical skills and manual dexterity (JOPR/c-1), while teacher EPU/b added these skills helped students develop personal growth (EPU/b-5). Other teachers were just as vehement in their arguments against the uses of hands-on. Teacher MPU/d was extremely forceful in her belief that projects like mobiles or "cutting of construction paper" were completely inappropriate for young adults. She felt that grades 7-8 should be geared more for social and intellectual pursuits (MPU/d-8). Other teachers were more pragmatic in their reasoning – they didn't have the time or space to indulge in these activities (JOPR/a-8, JOPR/b-8, JOPR/f-4).

Overall

While teachers seemed still very positive about the use of this element (at least facets of it), quite a few administrators and teachers felt that the new Ministry curriculum had done a lot to curtail its viability (ECR/a, EPR/a, EPR/b, EPR/c, MCU/e, EPU/b). At one school in particular, each participant felt that they had seen a dramatic decrease in this area due to the academically oriented guidelines (EPR/a-4, EPR/b-2, 6, 14, EPR/c-6, 7, 24).

Figure 11.3. Teachers Using Practical/Manual Skills Across the Curriculum

School	Relevance	"Life Skills"	Manual Skills
1. "Charitable"	7 / 8	4 / 8	3 / 8
2. "Forces Base"	5 / 6	1 / 6	1 / 6
3. "Open Option"	4 / 4	0 / 4	1 / 4
4. "Lone Scholar"	4 / 5	1 / 5	0 / 5
5. "Gemini"	3 / 3	0 / 3	2 / 3
6. "Program Leaders"	3 / 5	0 / 5	4 / 5
7. "Retrospective"	5 / 6	1 / 6	5 / 6
8. "Inner-City Innovators"	4 / 6	2 / 6	4 / 6
Total number of teachers	35 / 43	9 / 43	20 / 43

Social Skills

While almost all participants felt that the development of social skills had a certain importance in rounding out a child's education, the significance they placed on this element varied wildly depending on who was being interviewed. A number of teachers (10 or 23.3%) ranked it rather low on their priority list and approached it with extreme skepticism concerning its effectiveness. They believed group work to be an overrated, trendy fad thought up by academics with little validity in real-life classroom situations. Teacher MCR/d represented this viewpoint quite well:

> The one thing I noticed at teacher's college was aside from one professor they all talked about the value and the virtue and importance of group work. And none of them, in my mind, could pull it off successfully. I used to kind of chuckle to myself and think if these university professors can't make it work with a bunch of teacher candidates, I wonder how we are going to make it work? (MCR/d-8)

Teacher JOPR/e brought these comments into shocking reality. She said that when she was hired at the school she had been given a class with workstations (consisting of 4 students per table). Describing it as "horrific, absolutely horrific!" she felt that they did nothing but talk for a full year – "There were always one or two out of the four who would do the work and the other two would sit back - as is typical, right?" (JOPR/e-11). According to her, the first thing she did was to have the tables removed to be replaced with rows of desks. She concluded that:

> Then we were back to where we could get some order and discipline and so on - so we could actually impart knowledge. That sounds like we're feeding them with spoons - but we were. Then, we wanted to do some of that integration, so we would stop for three weeks. We had been so overburdened for two years with this chaos, there was no way we were going to do it more than a little bit of time. (JOPR/e-12)

While she agreed that students should be taught how to respect one another and to compromise, she concluded that this type of integration was a luxury, and ridiculous to be mandated as a universal approach - "it's like anything else - you overuse it and it's not special anymore. If I got roses every Friday then after a while getting roses wouldn't be great ... [pauses] it wouldn't be *so* great" (JOPR/e-19). Many teachers echoed her sentiment (albeit not to this extent). They said

that while they used group work as a teaching tool from time to time, they never felt compelled to do it. In fact, the majority of teachers 22 (51.2%) saw social skills as being only a secondary priority and that group work should be used only in conjunction with other techniques. In many instances, the only form of social work they engaged in were quick brainstorming sessions for a particular project (MCR/b-11), working with a partner (MCR/c-16), debating (MPU/b-56) or used for special events (ECR/b-5). A small number of teachers even expressed the belief that planning of any sort was unnecessary for the development of social skills. They said that if you just occasionally threw them into a student-interaction situation, it would just happen naturally (MCR/f-6, 22). This point is best made by JOPR/c, a physical education teacher:

> Social skills, I think, is something we don't really have to try and integrate – it's naturally there, if you do it properly. Especially when you are doing dance - You can't help it – it's all part of what happens. (JOPR/c-1)

Those participants that were sympathetic to the element gave a multitude of reasons why they were not using much group work or accenting social skills in their classrooms. Some felt that they were just not "group work" people (MCR/g-4, 5, ECR/b-5, 8, 13, 26), while others maintained that the structure of the school system or class size made social projects unfeasible (ECR/c-5, ECR/d-5). Three teachers emphatically stated that they believed Grade 7-8 to be an unsuitable time for group work - it should be indulged in at an earlier level (MCR/c-31, ECU/f-7, 9, 25, JOPR/f-7). Unfavourable guidelines (ECR/d-5, 6, 7, EPR/a-4, 21) and staff cut-backs (17E-23) were another set of reasons. Finally, one teacher said that he had done more group work in the past but that this had led to problems: "I probably spent sixty percent of my day in small groups [pause] which the principal chastised me for at the beginning of the year. [laughs] Your moving into this a little quick" (ECU/f-7). Some participants got around the group work problem by endeavouring to impart social skills through more teacher-student discussions and lectures (JOPR/b-3, 10, EPU/b-6).

Those teachers that had a higher opinion of the element gave a number of specific reasons why they had included it in the curriculum. Some engaged in it simply because the school environment was quite conducive to that approach, being encouraged by the board and administration (EPR/c-3, EPU/a-1) or because they simply wanted to escape the tedium of learning in rows (JOPR/d-5). Sometimes group work was assigned for more than strictly social reasons. In the French Immersion classes, teachers said that they planned group work simply to practice language skills (MCU/d-5, 6, 18, 25).

> In language immersion you have to do group work to make the communication meaningful ... in a second language. ... Whenever they have to present, this is where I ask them to evaluate their work. What did they do? (EPU/b-9)

This was also the case in some science labs, where students were paired so that their joint effort could finish a particular experiment in one class (MCU/e-8, 10). The teacher said that they may learn team-work, but this was secondary - her goal was strictly pragmatic.

The teachers who were most committed to group work (only 5 participants ranked it as a high priority) did so because they felt that adolescence was the greatest time of social development and the acquisition of social mores (ECU/f-7). Teacher ECU/c said:

> It can be a very cruel year for some students and it can be a very successful year for others - based on where they are in the social drama of life. So, we do a lot of group talking. (ECU/c-5)

In particular, these teachers said that they wished to give special accent to cooperation, team building (MCU/b-1, 7, 8) and sharing skills (MPU/d-10, MCR/h-6, MPU/a-7, EPR/b-6, 14, 15). To accomplish this, some made a point of placing the students in certain configurations. For instance, they would pair a student stronger in a particular skill with a weaker one with differing skills to develop cooperation skills (ECU/e-6, ECU/b-5, ECR/e-4). Other teachers thought less about balancing skills and more about social tolerance.

> The other thing I have them do is they do have a tendency to always want to work with their best bud. So, I mix that up a little bit so that they don't always have that chance - so that they're forced, in a way. So forced by me - I say to them at the beginning of the year "I'm not asking you to be best friends with anybody in the class - I'm asking you to do work with everybody." [and this is for socialization?] Yes. (JOPR/d-5)

Some teachers were very interested in the aspect of teaching respect for others and peaceful conflict management (JOPR/d-5, MPU/c-1, 3, 7, MCU/b-7). Teacher JOPR/b was quite emphatic:

> You don't live in this society without social skills. ... I have two rules in my class. You respect and you do your best. You respect me, not because I'm a teacher - it has no relevance to that - because I'm a human being. But, you also respect one another -it's very, very important. (JOPR/b-10)

On the whole, however, there appeared to be only a half-hearted attempt at group work on the part of the participants. This seems to have come from an internal dichotomy - while many believed that students should be given time to socialize and develop communication skills, teachers were also fearful about giving them too much freedom. The consensus seemed to be that unless activities at the Grade 7-8 level were greatly teacher-controlled, the students would spin off into unrelated chatter (voiced explicitly by ECU/e-6, ECU/d-1).

Individual

Individual Development was perhaps the most volatile element among those surveyed. Of course, no teacher took a stand *against* the development of student's independent thought or maturity. However, 14 participants (32.6%) seemed to voice their opinion with silence on the issue while 11 (25.6%) ranked it as low. This was based on the fact that they simply felt it to be beyond their responsibilities and more the concern of guidance counselors or parents. Some discussed its unfeasibility based on their inability to accurately measure success in this area

> No, it's a slow process and it's hard to measure. ... I can see this being done on maybe a one-to-one basis. Otherwise, no. (MCU/d-9)

11 participants (25.6%) made a number of comments that indicated their interest in having the element utilized in the classroom, but seemed to look on it as part of the informal curriculum. In most of these cases, the teachers wanted to boost the students' confidence so that they would better achieve in particular subject areas. They judged success through the physical manifestation of self-direction, working independently and meeting self-imposed goals (MCR/a-1, MCR/c-5, MCR/f-22, MCR/g-5, ECU/e-8, 9, JOPR/f-9). The more personal aspects of this element were deemed more appropriate for spare periods (MCR/b-10, 15), drama and sports (ECU/d-1, 5). Two teachers, in fact, said that they felt rather torn by what the Ministry prescribed and what their own consciences told them to teach:

> I think the one thing that my kids thrive on is responsibility. They need the feeling that they are important and that they have been given opportunity. Some of the worst actors in my room are the ones that need that responsibility to choose what they would do today, or choose how they would approach this, or how they would finish this or resolve this. To give them that it is like giving them a pot of gold. I think not enough of it happens, and that's due to the strict rules that you need to follow to complete. You know the drill. (ECU/c-21)

> It's a very tough one, because if you look at my job ... I'm there to deliver the content. My personal point of view is I'm there to give them some confidence, especially teaching to go and get the content somewhere else. (JOPR/b-5)

A small number (7 or 16.3 %) seemed to be highly driven by their desire to see students become independent thinkers. Most talk about this when they are discussing artistic creation (MPU/b-7), scientific experimentation (MCU/e-11) or ESL (EPU/e-14). In these instances, the teachers usually encouraged the students to take chances, to be self-confident, and to make actions without self-doubt. Teacher MCR/g is most explicit in her aspirations:

> A big thing with me is learning to problem solve, and my students will often say to me in art "Madame, tell me how to do this," and I'll say, "well, no - I'm not going to tell you how to do that - you have to figure out on your own." ... They have to realize that this guides them for their future to learn to do that instead of always running to someone for help. ... To be independent. [The students look to] the whole experience. (MCR/g-5)

One teacher in particular (the one who founded the Integrated Studies program in School 8) was extremely drawn to this element. However, he strongly believed that the environment and trials he had created for the student were of infinitely more importance to the student than any praise the teacher could heap on the student's work. He stated:

> Self-esteem is totally, totally tied to production - it has nothing to do with what the teacher says to a kid, or building a kid up - the kid knows. In fact, if you build up a kid and the production is not there, then it has a reverse effect. The kid basically loses all faith and the kid considers you a liar, because a kid knows if they're not performing. If you tell a kid they've done well and they've done 30% on something then that tells the kid two things - number one, the teacher is a liar - number two, if that's the best I can do then I must be bloody stupid. (EPU/f-39)

Underlying Principles

While almost all participants in this study mentioned Underlying Principles, their comments were relegated to only two sub-categories. By-and-large, these were divided along denominational lines: Catholic values played a substantial (if secondary) role in all Separate schools while multiculturalism was stressed by a few public school teachers.

Religion

Of the 20 separate school teachers interviewed 18 (90%) felt that Christian principles were an important element that permeated the system. In most cases, however, they tended to be vague on the actual details of how these were included in classroom teaching. Rather, values were said to enter the teaching process "naturally" (MCR/a-1, MCR/h-7, ECU/a-13, ECU/b-6, 7, ECU/c-6, 7, MCU/a-6) through conversation or incidental activities. A number of teachers mentioned that they believed they transmitted this element to the students through their demeanour (MCR/e-1, 6, 28, ECU/e-7) or their perspective on certain subject areas (MCU/a-6, MCU/b-6, 8, 16) such as economics and charity work (ECR/c-6, ECR/d-7). While it was always there in the shadows, most participants explained that they were prohibited from specifically

planning (MCR/d-2, 3, 9, ECU/F-8, 9) or quantifying Christian beliefs into one block of time (ECU/d-4, MCU/c-6, 19, MCU/d-9, 35, MCU/e-12) due to its ephemeral qualities. Some stated that while they personally did little integration of this element in the class, Christian principles came through in extracurricular activities like mass or sports (MCR/f-7, 33, 36, ECR/b-6, 7, ECR/e-5, 7). In the end, most Catholic teachers ranked it as secondary (9) or low (8) in priority – all said that they were comforted with the knowledge that it was there. Teacher MCR/h most eloquently explained this:

> I think especially being in a Catholic system you have to look at the Christian ideals as something you always want to promote regardless of what subject you're teaching. Just the underlying basics of what a good person is, how to live your life properly - that's always a theme that is constantly coming up in any class situation. Not necessarily in teaching a lesson all the time, but even in just class discussions that you have or things that come up during the day that you want to talk about as a group... Just to make sure that they understand what it is to be a Christian and why it is we've chosen this separate school... you know, make sure they have an understanding that they are different than other schools, and that they are here for a particular reason. (MCR/h-7)

Two participants went beyond this mean to discuss this element in concrete terms. The first, (mentioned earlier on p. 293) consciously integrated Christian charity work in almost all the classes she taught and compelled her students to take an active role in the events she planned around this theme (MCR/b-1, 4, 5, 11). The second, the administrator at school 4, said that the school actually planned annual motifs focusing on some aspect of Catholicism, this year being Charity (ECR/a-2). She said that she followed these activities very seriously:

> I think that that is a given in a Catholic school. You have probably a higher mandate than even the Ministry mandate. So, certainly... our theme is charity this year and we infuse social justice and looking at how it impacts on people and the world. (ECR/a-2)

Two public school teachers, while not being mandated, made an informal effort to teach religion in their classroom. Appearing almost defensive about their actions, they argued their conviction that other arms of society (religious leaders or parents) were not guiding students. They, therefore, felt that it was incumbent upon them to take on some of the burden:

> You don't have to take anybody's individuality or principles, but this country is based on Judeo-Christian principles. I get quite peeved at schools for saying we cannot do it. We can't indoctrinate, but you can't force anybody - just like you can't feed a baby with a spoon shoving it down his mouth, he is going to spit it up - it's the same thing. ... it is really sad that we have to say "oh, excuse me - we can't do that". Who said you can't? Exposing somebody to ten theories or telling them it exists is ten times more knowledge and skill to me than saying we can't do it, so we leave it out. (MPU/d-12)

> Sometimes they look at me and I sound old fashioned, but I think because we don't have any religion in the school and they don't do any of this systematically, the kids don't have any help to develop their morality. You know, the *theorie Kohlberg* [sic], when you said different steps of moral development. I would say the students, if you don't help them develop their level of judgment, of morality, they will remain, you know, at the level where "they didn't see me - I'm okay". So, I find I do it incidentally. ... But, I'm aware of it. (EPU/b-7)

Multiculturalism

In all but the urban elementary school, public school participants seemed to eschew the inculcation of values of any kind. A few who were questioned further said that this was due to the fact that the schools were composed of relatively homogeneous communities. Ethics and cultural mores, they felt, were already being taught informally at home and naturally entered the school that way (MPU/a-6, MCU/a-5, JOPR/a-12, 13, JOPR/d-7,8, EPR/b-7, EPR/c-4, 5). The principal of School 5 portrayed the reality of the rural Ontario lifestyle:

> This is a homogeneous grouping. We've got white Anglo-Saxons most, everybody. ... the majority is either Protestant or fundamentalist Protestant. So, we have a real base, a real value system that people have. We've got Dutch and German background, and also farming. All of those kinds of things do permeate what's going on at this school. I'm coming from a very multicultural kind of background, and I was just shocked. I went to the graduation and one non-white kid walked across the stage. It was a Chinese child, the son of owners of the grocery store, and the people behind me said "there's the Chiney boy," and I thought "oh, my God! What have I moved to?" (JOPR/a-10)

> The majority of families are two parent families. They're working, they've got individual homes, they're of a middle class or above level. So, underlying everything, I would say is this sort of Christian belief that is definitely there. Very patriotic Canadian, I mean anything to do with Canada. We have a red and white day and Canadian heritage day and all of those kinds of things are very much a big part of this school. People really do buy into the family

> values and all of those kinds of things that are very much a part of the school. (JOPR/a-11)

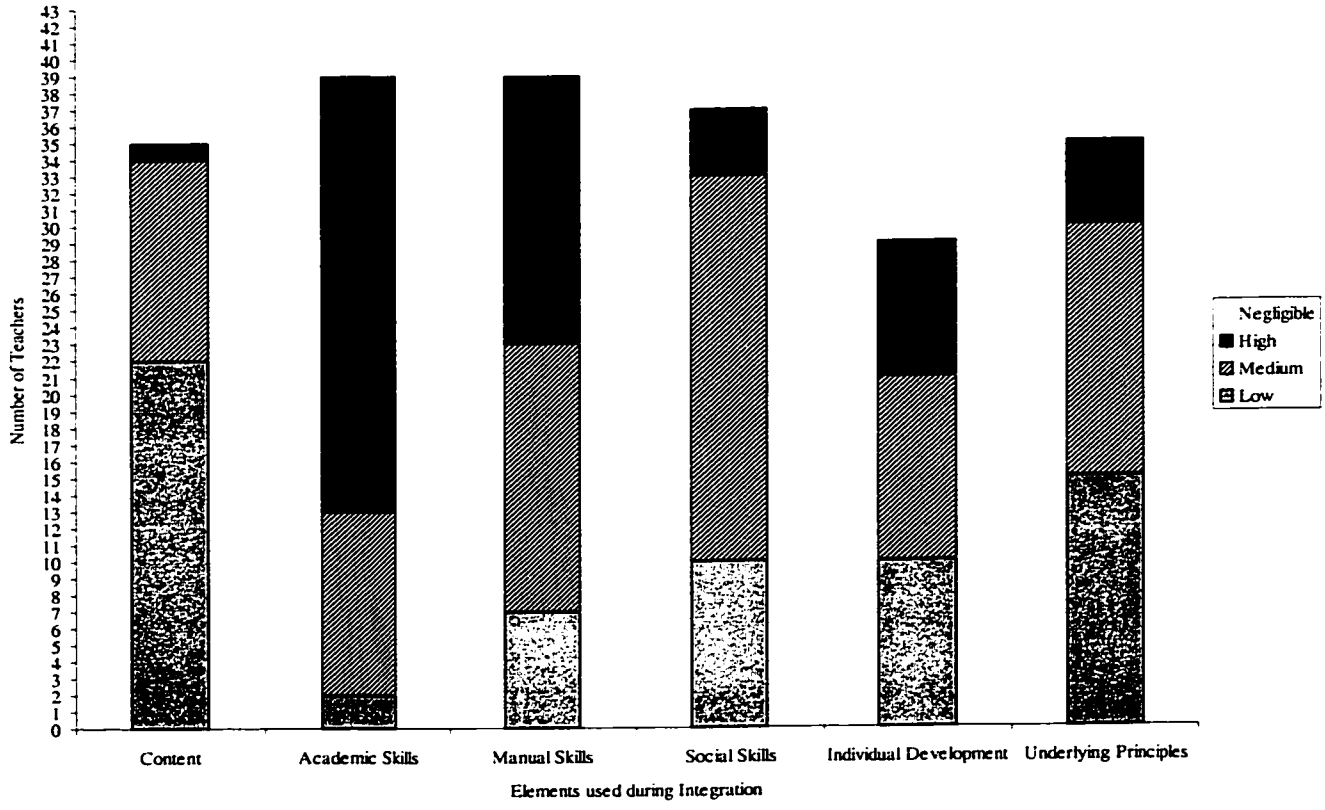
The one underlying principle that did emerge occasionally was multiculturalism. In these instances, individual participants inserted this element into the curriculum simply because they thought it was lacking in the guidelines (MPU/c-9, JOPR/c-1, 2). The one school that showed the greatest overall interest in this aspect was the urban public Elementary school. Most teachers mentioned that due to the high immigrant population at the school, they felt compelled to include the informal study of other cultures. While it was the focus of many of the ESL teacher's classes (EPU/e-4, 7, 13, 14), it was repeatedly mentioned elsewhere (EPU/a-8, EPU/c-6). In the Separate schools that were interviewed, only one teacher was adamant in her desire to inculcate this value to the students. She did so because she felt the Catholic system did not teach enough about different cultures:

> With me, my heart is really with multiculturalism. I have ESL students in my homeroom and I also work within small groups, so I'm coming from that approach all the time. I do various things like in Social Science we just did a lot in February for black history month. I'd integrate that or native studies or, like in English, reading books from around the world or reading short stories with a multicultural message to them, or like issues of racism or prejudice or citizenship. In religion, talking about accepting of others and then reading stories about kids from other countries or whatever. So, I'm always going from that angle. [it's your obsession] yeah - more or less. When talking about the big project - for about three years we've done a big international day. We have a big talent show - and we can bring it into the curriculum. (MCU/b-1)

Overall

As shown in figure 11.4 below, it appears that only two elements were ranked by the majority of participants as having a high suitability for integration across the various subject areas – Academic Skills (primarily Language skills) and Practical/Manual Skills (primarily relevance). The rest are not discounted, but on the whole assume secondary importance. Most participants acknowledged that Social Skills and Underlying Principles have a place in the curriculum but assumed that they just naturally integrated into the activities. Individual Development is ignored by many and thought to be beyond their control. Lastly, Content is ranked almost universally low by all participants.

Figure 11.4 - Aggregate Importance of Elements used during Integration (Teachers' Perceptions)



*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

Analysis of Dimension B: Objectives of Integration

Subject Unity

Almost all participants agreed that one of the main objectives of integration was to enable teachers to make more efficient use of class time. The older teachers mentioned that they had been doing this for several years - nipping here, combining there - to save a little space for other activities (MCR/f-22, MPU/d-14, 15, ECR/a-2, ECR/b-30, EPR/b-3, 11, MCU/e-23, JOPR/b-21, 47). Some teachers said that it had enabled them to "kill two birds with one stone" by allowing them to streamline the evaluation process and mark for two skill areas or outcomes at the same time in one project (MCR/f-1, 7, ECU/f-11, EPU/f-29). One principal went as far as saying that integration allowed for different types of testing to occur:

> I guess, there would be an evaluation purpose. To say the teachers simply evaluate with pencil and test format - there is more to it than that with integration. It allows the teachers to take assessments and evaluations to a wide variety and strategies. (MCU/a-10)

Many teachers admitted that the present curriculum had actually increased their motivation to integrate the curriculum. For them, it had now become the only way that they could incorporate all the new Ministry expectations into their courses (MCR/e-1, ECU/c-1, 10, ECU/f-11, ECR/e-13, 14, EPR/a-12, 13, MCU/b-15). The most radical of the younger teachers described the situation as "integration for survival" (ECU/f-12, EPR/b-11). The following excerpts give a fairer cross-section of the comments made by the teachers who were concerned with the new documents:

> It's a very realistic reason. There is just simply not enough time in the course of a day to allow for every subject area to be taught. ... If we were to address all the issues that the Ministry wanted us to do, we'd have to extend the school day. So that's a very practical, realistic approach for teachers. (MCU/a-10)

> I think it is necessary to draw on various areas of the curriculum and bring it together for a project or a topic or a theme. I think with the curriculum coming out, I think it is almost becoming necessary - because there are just not enough hours in the teaching day if we are not careful to cover everything we have to cover. So, if for one 40-minute period we can target areas from

> English and areas from history then that's helping, as long as you don't lose the focus of getting the content and the skills. (ECU/d-7)
>
> I do so much English in religion - like a lot of my religion program is, you know, writing, writing the acrostics. We do a lot so that I can cover a lot of the English skills in religion class. If not, I would never get to it - you know what I mean? (MCU/b-15)

Several participants went beyond this strictly pragmatic objective, however. They agreed that while other methods could gain just as much time (the removal of extraneous content, specialized teaching, adding more hours to the school day), integration also had the ability to organize the curriculum into a more meaningful whole (MCR/c-1, 4, EPU/a-1, EPU/f-23, 24). Science projects, thematic units and just the drawing of connections seemed to be important to many participants above and beyond strict efficiency. Language teachers were especially drawn to integration as a way to give meaning to the study of English or French. They pointed out that they could spread language skills in many areas, reinforcing its importance again and again (MCR/g-10, EPU/d-1, 6, 11). Even generalist teachers were quite adamant about fitting language and numeracy into classes in some purposeful way (ECR/d-1, EPR/c-10, 12, JOPR/a-1, JOPR/f-13, ECU/e-1, 2, 3). In these instances, connections were reinforced for increased meaning rather than reduced for efficiency (MPU/a-3)

Many participants pointed out what they saw as "natural" combinations of subjects (MCR/f-17, MPU/a-13, MPU/b-37, ECR/b-2, 4, JOPR/c-9, JOPR/d-1, 2, EPU/b-15). Informally, they noticed affiliations and points-of-contact between math-science (ECU/a-1, ECU/b-2, ECU/f-15, ECU/d-1, ECR/b-2, ECR/d-1), language-drama-the arts (ECU/a-1), history-geography (ECU/a-1, ECU/f-1), geography-mathematics (JOPR/a-1) science-geography (MCU/e-1) drama-history (ECR/b-2), Religion-Art (ECU/f-1), History-English (ECU/d-7), art-math (ECR/d-1) Science-physical education (JOPR/c-3), Technology-Science (MPU/a-1), the Arts (ECU/c-10), and Language-History-Geography (ECU/b-2, JOPR/d-1, MPU/a-1). School 8 had

formalized the links between English-History-Geography combination and it had appeared to be a very suitable trio at that location (EPU/f-31, EPU/c-15).

Most teachers explained that they had reached these "natural" connections through first-hand experience. In some cases, it had crept up almost incidentally without their notice after years of teaching (JOPR/a-18, JOPR/c-3). In others, the links had been forged through years of study and conscience effort (MPU/a-13). One said that through painful experience she had realized how far she could stretch the subject areas - she felt that 2 or 3 subject areas were the limit (ECU/b-2, 11). Almost all agreed that proper integration could only come with time and experience (JOPR/c-9). These subject areas were linked by connections that existed in the minds of the participants. Some tied them together based on shared skills (MPU/a-1, 13), others through shared information. In the case of History and Geography, the teachers' believed that these two subjects were united under a larger body of knowledge entitled "Social Studies" (MPU/a-17).

Several teachers had quite firm opinions about "artificial connections" that would just not work. In most cases, they referred to forms of integration that had been forced upon them by authorities such as the Ministry or board. The responding participants felt that these poor forms resulted in illogical connections (MCR/d-4, 6, ECR/c-1) and mediocre results (MPU/b-1, 2). The bellwether for one teacher was when the students themselves found the connections unnatural (EPU/c-18). Two teachers described the problem:

> ...it's very phony sometimes the way they do things. They call it integration and they have a little theme on birds and stuff. This is not integration, you know, this is a thematic approach - but it's not integration. Integration, I would say that there is something happening in life. Okay, tomorrow, I have to do this this weekend, this summer. Okay, how am I going to deal with this and what kind of skills and abilities do I need in order to face all of that – okay? (EPU/b-15)

> I don't think it makes it an integrated approach if all you do is throw the content together and say "okay this is integrated". There has to be some real connection otherwise the relevance doesn't come through for the student. (MCR/c-1)

Student-Centred

Most of the teachers interviewed stated that one of the primary reasons for integrating the curriculum was for the students' benefit. When further questioned, however, the teachers' intentions ranged from mild attempts to interest the students to relinquishing some control to them during certain activities. The majority fell somewhere in the middle.

Interest/relevance

A towering number of participants said that they included material from outside of the subject area simply to interest the students (MCR/f-16, ECU/b-11, 23, ECU/e-11, MPU/b-14, 19, MPU/c-10, 16, 22, MCU/b-34, MCU/d-19, JOPR/d-10, EPU/a-1). One teacher put it quite bluntly:

> It is a survival trait for seven/eight. With this particular age group you have to do everything you can to grab the kids' attention and to get them involved because it's such a difficult age and if you don't then [as a teacher] you're dead. (MCU/b-34)

The motivation for teachers went beyond the hopes of merely shocking the students into active listening, however. It was hoped that by integrating something from "real-life", the students' imaginations would be twigged, allowing them to see the relevance of the subject under study (ECU/d-7, MPU/b-5, MPU/c-22, ECR/c-4, ECR/c-13, MCU/b-15, 16, JOPR/b-21, EPU/b-14, EPU/f-1, 13). As well, teachers said that they made frequent connections between other subject areas so that the students could make sense of "the whole picture" (JOPR/a-1, EPU/d-11). Without this link, a number of participants concluded that the whole education process was useless - the students would not be motivated to learn anything and become disinterested (MCR/c-1, MCR/h-1, ECU/d-6, ECU/e-8, MPU/d-16, MCU/d-24, 25, EPU/d-19). One teacher said that he did it so he could answer the age-old question asked by students:

> So, ultimately if you can make it real for them, make it more relevant for them, and show them how it all fits together... Sometimes they say, "why are we taking this anyway?" So you can show them how this stuff all fits together - then, I think, they're going to get much more out of it. (ECR/c-13)

By breaking these boundaries, they concluded that it brought the teaching process "to life" (MCR/e-3, 6, 13, EPU/c-15, 22,). However, this depended on the subject that was being taught. Certain disciplines, such as science, just seemed naturally interesting to the students (MCU/e-7, 23), and did not need much integration. Others, like religion, grammar and history were seen as more isolated and boring - combining subjects would "spice things up" (ECU/e-11). Interesting enough, while the students considered the separate courses of English and history quite dull, they were fascinated by the fused Integrated Studies program in school 8.

> They find history kind of boring just straight and so if you're reading a historical novel it's much more interesting. They remember things about Canadian history that they never would. I remember [the novel is] in Tadoussac by the Saint Lawrence and they [the students] have just a whole picture in their minds of what that was like that small community starting up in the 1600's. So, it brings the history alive and ... it improves student interest and growth - I think that fits in there, as well, because they're much more motivated. In an integrated unit they can see how there is a novel study to do but there is also other activities and it just seems a little more interesting and exciting for them. (JOPR/a-9)

Addressing Various Learning Styles

A number of participants said that they had altered the curriculum at times to meet the various learning styles of a particular class or the needs of a certain student (MCR/a-1, 5, MCR/e-15, MCU/b-15, JOPR/e-11). They indicated that some students had poor abstract reasoning qualities or were immature for the grade level. Others were clearly more advanced in certain areas and underdeveloped elsewhere. To keep the entire group engaged and intellectually stimulated, a number of quite different approaches had to be used at the same time (MPU/a-5, 14, MCU/c-14, MCU/d-21). This way all students were able to show the class their strengths as well as their weaknesses, thereby building their confidence. Two administrators were especially expressive about the importance of this objective for integration:

> ...the main purpose for integrating is to address learning styles. It is also to address teaching styles. It's to make sure that kids like to come to school and want to come to school. It's also done to ensure that there are different ways of making sure that learning does take place. If we didn't integrate it would cut

> down on the different approaches that we can use. Because of the knowledge that we have now, we know that kids learn differently, and we cannot teach them the same way all the time. When we integrate we make it more exciting, we hopefully get the kids involved in the learning, and when they are involved in their learning then they can demonstrate that learning. From that demonstration we know what they have learned. (ECU/a-7)

> ...it gives an opportunity for students to showcase different styles of learning. So, for example, if one is presented with a project, you will find teachers that will offer a wide variety of strategies to present that project. It could be in audio form, it could be in visual form, it could be in written form or it could be done artistically. So that integration enables students to succeed. (MCU/a-10)

In most cases, this included the addition of more tactile forms of learning. For example, art would be included in an unrelated subject area such as math, science or religion, simply to engage the students who were more artistically inclined (MCR/f-1, 17, ECU/f-4, 15, EPU/e-4). A math teacher, who knew that a particular group of students were not capable of dealing with abstract numbers, used many practical applications - he focused almost totally on the calculation of money and the stock market (ECR/e-13). Another teacher said that he frequently used drama in their classes to bring out the withdrawn students (ECU/d-1). He explained:

> if you are in a class that has one particular strength and they enjoy drama, for instance, then why not use that strength to bring in some history and to bring in some geography, to do some role playing in other subjects. If it's something that they enjoy, then why not use that and, I think you would be foolish not to. If it is something that they enjoy, you are still teaching them history - you are bringing it home to them and it is becoming relevant to that student. (ECU/d-7)

Student Control

A very small number of participants said that they had relinquished some control of classroom activities to the students. However, none admitted that they did it on a regular basis. In most cases, "student freedom" was highly regulated by pre-set perimeters determined by the teacher. Students could take over the direction of a charitable project (MCR/b-11), or decide to take a learning activity somewhat further than the teacher had intended (MCR/g-8). The teacher may even let student interest dictate how long a thematic unit lasts (JOPR/b-31) or give them an amount of options:

> The kids sometimes control the options of the tasks that they can do. ... They can choose a number of tasks from 6 - but all roughly cover the same expectations. So, I try and make sure that the student has some control so that they can choose a topic that is a little more relevant. If it's language arts for instance, they can choose what debate they want to do as long as they end up with the expectations. They can find their own thing that is relevant to them. So some of them might do hockey players better because that's relevant to them. Some might do dogs or cats or pets, but they can still meet all the expectations, whatever they are. There is still some flexibility. (EPR/c-12)

In the case of school 8, students had the ability to work in a self-directed fashion at their level. However, they were to do this within a classroom environment meticulously created by the teacher (EPU/b-5). It was made quite clear that the teachers' intentions were in no way to abnegate control of the classroom setting to the students, but to spur them on as active learners, with a feeling of responsibility for their own work (MCR/c-5, 17, MPU/d-5, 16, EPU/b-5).

Social Continuity and Political Change

An almost negligible amount of participants made any comment on these objectives. In most instances, they simply indicated that they integrated the occasional underlying principle to make the students better citizens, human beings or better adapted to the changing world (MCR/e-6, MCR/f-15, 36, ECU/c-10, EPU/b-14). Teacher MPU/b considered art to be a cultural imperative and advocated its inclusion in the curriculum whenever possible (MPU/b-15). Others felt that they were defenders of state directives (MCR/a-5, MCU/c-14) and should dutifully carry out this mandate:

> We have policy makers and you pretty much have no options. Whatever the policy of the days is, I will teach that. Like I said, I have gone through four different changes in the curriculum and they take a lot of time, to invest in learning them and preparing and then in two years you have to start again. So you don't have time even to get that under your belt, long enough to completely follow the policy. You don't have the option to disagree with the policy and say - here you go. You don't have those options if you want the job. (EPR/c-13)

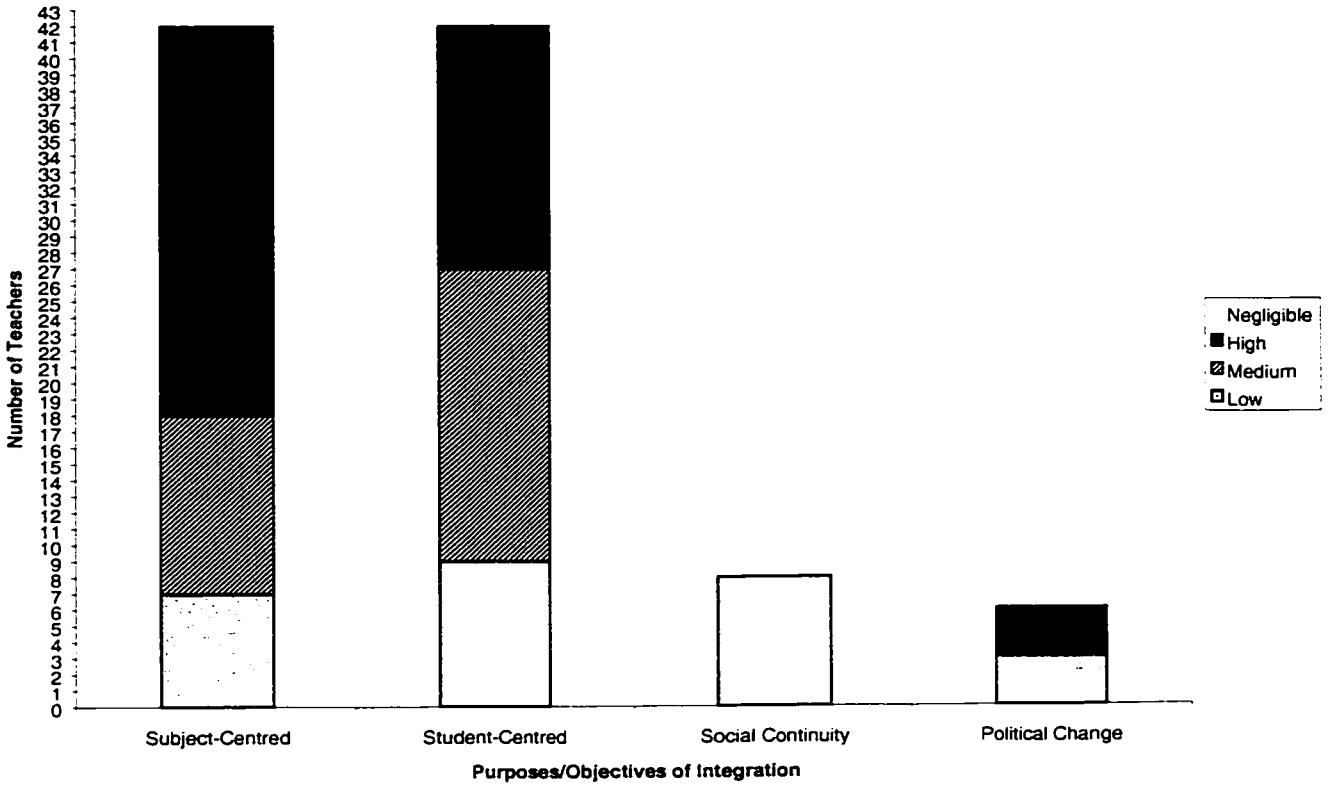
However, these sentiments remained quite vague and were mentioned solely in passing. Only three teachers rated change as high. The first was teacher MCR/b, who was inspired to make

Christian charity-work the centre of her course (MCR/b-11). The second, teacher MCU/b displayed just the opposite motive - because she felt that the Catholic school was too homogeneous, she took it upon herself to integrate multiculturalism into much of her coursework (MCU/b-15, 16). The last was teacher JOPR/f, who firmly believed in the integration of computer studies into all facets of the curriculum in preparation for the rapidly changing, technology-driven society (JOPR/f-16). While all three held vastly different opinions about the world, they held the same belief that the world was changing and that they had to do something to prepare the students for what awaited them in the future.

Overall Remarks

As can be inferred from above, the bulk of teachers were torn between two objectives, both in integrating the curriculum, and in teaching the course in general. While they wished to make the class interesting and relevant to the students, they also felt that they had been mandated to teach a prescribed amount of material. Most teachers therefore felt no compunction about using integration as a tool for both ends simultaneously, and when asked to prioritize the two were loath to choose. As can be seen in figure 11.5 below (and even more graphically in Appendix C), very little may be definitively inferred from their responses. In most cases, the student-centred objective appeared to be a sincere wish of most, but the subject-centred objective seemed to reflect the immediate reality. This was especially true of schools 4, 5 and 7 (all rural) whose teachers expressed concern about the new curriculum.

Figure 11.5 - Teachers' Perceptions about the Objectives/Purposes of Integration

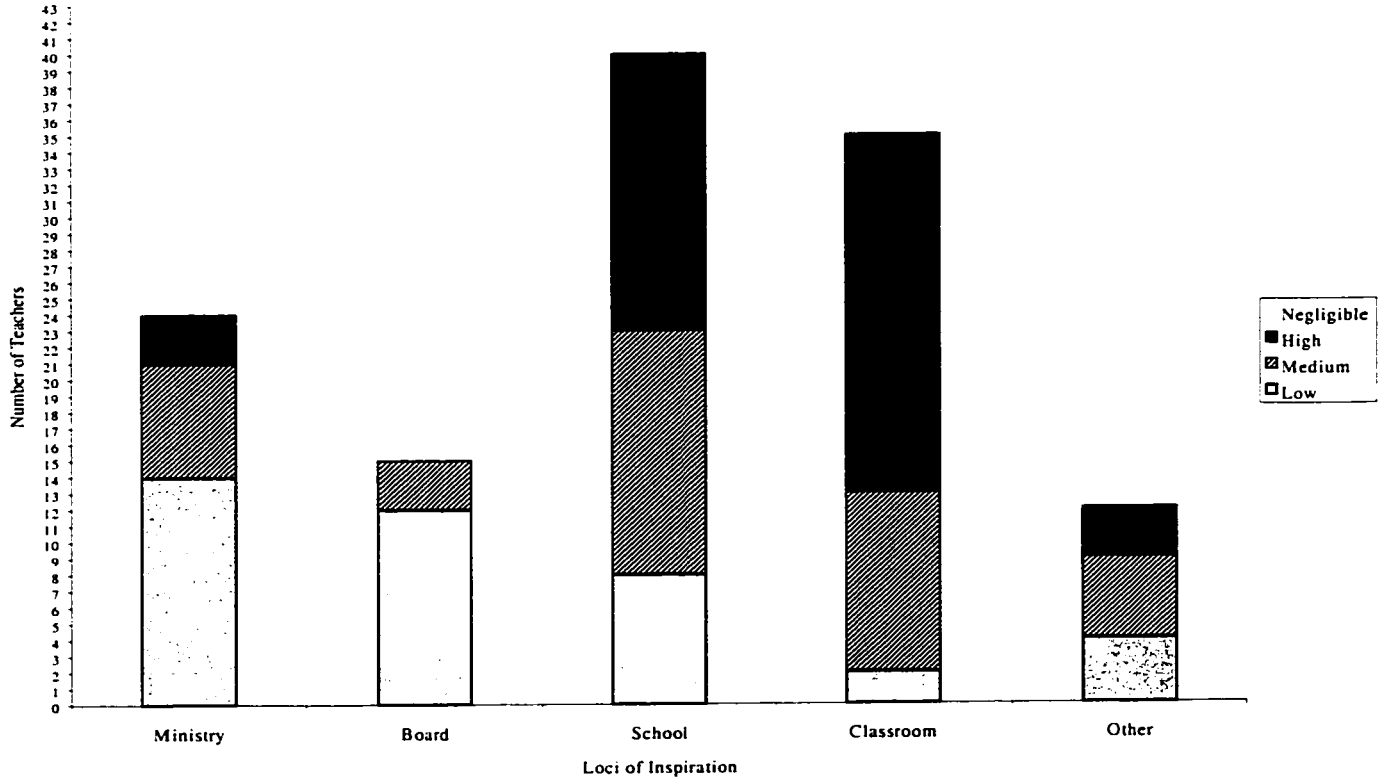


*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

Analysis of Dimension C: The Loci of Inspiration for Curriculum Integration

All the participants made some remark about the various influences on their teaching methods. Of those surveyed, 24 (55.8%) referred to the influence of the Ministry, 15 (34.8%) mentioned the school board, and 12 (27.9%) other sources. It was quite obvious, however, that most teachers discovered various ways to integrate the curriculum through personal, rather than second-hand experiences - 40 (93%) discussed the importance of their colleagues and 35 (81.4%) mentioned classroom experience as the most important inspiration for their integration techniques. This sentiment was shown in stark detail when participants were asked to rate these influences from high to negligible (displayed below in figure 11.6).

Figure 11.6 - Loci of Inspiration for Integration (Teachers' Perceptions)



*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

Ministry's Influence

The single influence that the Ministry seemed to exert over most of the responding teachers (in terms of integration) was through the prescribed curriculum documents. First, a number of participants at two schools attested to the fact that they had been highly effected by the Common Curriculum's explicit message to integrate. At School 1 ("the Charitable"), teacher MCR/c said that she had done the science project solely because it was a directive of the Ministry (encouraged by the principal). As indicated earlier, (p. 301-2) school 5 (the "Gemini") had also been adamant about implementing a team-teaching, theme based programme across the grade 7-8 years, driven by the agenda of the Common Curriculum. When the new guidelines severely restricted both the science project and the team-teaching approaches as viable educational tools, both schools immediately dropped them, throwing the long-term influences of the Ministry into question. While the participants involved said that they felt rather jaded by having the "rug pulled out from under them", they also felt a sense of relief from practices they thought of as stressful, problematic, and not their own (MCR/c-17, EPR/a-20, EPR/b-1, 2, 24, EPR/c-2, 24, 40, 41).

The new, rigorous guidelines appeared to have a more implicit influence over teachers. While the participants noted that the new ones were split into segregated, discipline-based documents, they also remarked that if they tried to fulfill the large number of expectations without some combination, they would not finish the course of studies by the end of the school year. They, therefore, endeavoured to seek out and combine similar expectations in two or more subject areas to save time. Many of the teachers actually stated that the present guidelines were a greater influence to integrate than past curricula due to this fact (MCR/d-5, MCR/e-19, MCR/f-20, 27, MCR/h-19, 20, 27, MPU/a-25, ECR/e-23, MCU/c-1). Some teachers even complimented the new guidelines for remaining silent on any issues dealing with teaching methods. That way, they said, it gave them the freedom to develop their own (ECU/b-24, 25, ECU/c-25, ECU/e-10,

ECR/c-23, MPU/b-1, 2, 3, 43, MPU/d-25). Only three participants felt that the present guidelines had made any explicit contribution to the integration process and had actively sought out connections between subject areas – two of these people were administrators (MCR/a-12, 15, ECU/a-1, MCU/e-2, 33).

Juxtaposing these compliments were a number of criticisms by teachers. Many felt that the Ministry had an agenda opposed to integration, and that the documents they set up hindered integration (for further commentary see Dimension F). Some respondents said they were nonplussed that the Ministry had torn apart the previously fused subject areas and had made the expectations very discipline-centred and grade-specific (MPU/b-15, 34, ECR/a-1, 17, JOPR/a-28, JOPR/c-22, EPU/b-28,). A sizable proportion (16 or 37.2%) simply made no comment one way or another about the Ministry or the documents.

Board

The School boards appeared to exert the least amount of influence on the way teachers arranged the curriculum. In fact, 28 participants (representing 65.2% of those interviewed) either made no reference to this level of the education system or explicitly denied any connection to the board in terms of curriculum (MCR/b-24, 36, MCR/c-19). Three administrators suggested that this low rating may have been due to the chaotic state of bureaucracy at that level caused by the recent board amalgamations (MCR/a-12, ECR/a-18, MPU/a-26). Most of the responding teachers were not as charitable, however. They agreed that on rare occasions they obtained resources from board consultants (MCR/f-21, MCR/h-28, ECU/b-27, MCU/a-18) or that board members would attend special events at their school (MCU/b-25). However, beyond this, the board seemed more like a shadowy figure whose information filtered to them through the rumour mill more often than not (ECR/b-34, ECR/e-5). This isolation seemed to work in some teachers' favour by giving them a sense of autonomy and freedom from authority. One teacher said that she had worked previously in a board that strongly encouraged the use of a certain pre-designed

unit plans, and she felt much spontaneity and teacher control was lost (MPU/d-2, 3, 25). Another said that the Integrated Studies program developed at his school had been allowed to spread "naturally" to many other schools with little interference or hindrance from the board (EPU/a-1).

The school boards fulfilled a somewhat influential role at only one site. In School 6 (The "Program Leaders"), formal positions – "Curriculum Team Leaders" - were given to a number of teachers based on specific subject areas (English, French, Math, Science, Social Studies, the Arts, Religion, Design and Technology, and Physical Education). These "leaders of servitude" were held responsible to be liaisons between the board and the teachers, relaying decisions, criticisms and praise (MCU/c-2, MCU/d-12, 38, MCU/e-33). It should be noted that even though the teachers interviewed were the actual curriculum leaders, they still thought of the board as having a low or secondary influence on teachers' perspective.

School

The School appears to have had a significant impact on teachers' outlook on integration. The actual loci of inspiration were found in the school's structure itself, from the administrator and especially from colleagues.

Administrator Inspiration

Three of the administrators professed that they were the most influential promoters of curriculum integration on their site, instilling this method in teachers through verbal encouragement and in-servicing (MCR/a-12, 25, ECR/a-25). Principal MPU/a was the most confident about his role:

> It would have to go in this order... It would be myself as the administrator, then the Ministry and then teachers. ... as professor at the University of Toronto, I taught subject integration and it was just because it was something through my own research and findings, and I believed strongly in. So every poor teacher of whom I am the principal has been affected by it too. (ECR/a-25)

Teachers who commented on this aspect seemed to have a different perspective, however. Most felt that the principals had played more of a supportive role rather than being the originators of

the idea. At school 1 (The "Charitable"), teachers MCR/c and MCR/d admitted that they would not have been as keen on a science fair without their leader's encouragement, who had in turn been inspired by the Ministry (MCR/c-18, 1MCR/d-4). Many reserved the praise for their principals, not for the direction they had given, but more for their financial support and the professional freedom that they had given the teachers to follow their own path (MCR/e-19, ECU/b-28, MPU/b-45, MPU/c-36, EPU/f-22).

Informal Colleague Inspiration

The bulk of teachers who were affected by school-level influences seemed to indicate that they had found the greatest inspiration from informal contacts with colleagues. They explained that sometimes this would take the form of informal meetings throughout the day (MCR/e-9, MCR/f-21, ECU/d-21, ECR/c-12, 23). At other times this would be the sharing of resources and ideas about what methods worked and what did not in the classroom (MCR/f-10, ECU/c-8, MPU/a-26, MPU/c-18, 21, 31, ECR/d-25, MCU/e-33, EPU/c-14). Some teachers mentioned that curriculum would just naturally filter into unrelated conversations in the hallway or on the ride home (ECU/b–29, ECR/b-34, 35, JOPR/b-20, JOPR/c-22, JOPR/d-9). One administrator said that she had seen a rather heated argument over the curriculum in the teachers' lounge and was quite pleased to see her staff so passionate about their profession (JOPR/a-18).

Some schools appeared to have a more systematized communication pathway. At school 6 ("Program Leaders"), all the teachers said that they had a great "grapevine" – a teacher may say to her colleagues that she lacks something and a resource would wind up in her mailbox the next day (MCU/a-18, MCU/b-13, 14, MCU/c-8, 11, 12, MCU/e-17). Some schools even appeared to have fairly regular, semi-formal meetings to deal with curriculum issues (MCR/f-9, 31). At the elementary level this was divided along divisional lines (ECU/a-4, ECR/a-18, ECR/c-8, 9), while in the middle school, this took more of a subject-based structure (MCU/d12, 17, 18, MCU/e-18). These sessions were held for two main reasons – to bring teachers who were weak in certain areas

up to speed or give specialist advice (MCR/e-4, 20) or to ensure that all expectations were covered with little unnecessary repetition (MCR/c-8, ECR/d-8, MCU/e-19, EPU/b-11). Most of these responses came from younger teachers - the older ones (mostly within five years of retiring) appeared to be less social and kept themselves to themselves a little more (namely ECU/e, MPU/b, MPU/d, ECR/b, MCU/e, EPU/f). While reticent about co-planning or "chatting" because "everyone knows the drill" (EPU/f-6, to 8), teacher EPU/f did act as an important, if informal mentor at school 8 ("Inner-city Innovators"). He had given a number of workshops on his Integrating Studies program and had been of extreme inspiration to teachers EPU/c and EPU/d. Each aspired to copy his techniques, although they acknowledged that it would take time to master it as he had over the past 20 years (EPU/c-22, EPU/d-19, EPU/f-32).

Co-Planning

Some teachers said that they did a lot of long-term planning of their courses with a few of their colleagues (MCR/h-10, 21, MPU/d-15). By meeting in groups of 3 or 4, the participants said that they were able to more precisely lay out the expectations for individual students (MCR/a-2, ECU/a-15, MPU/c-12, ECR/a-1, JOPR/d-1, EPU/d-10) and to bounce ideas off one another (MPU/c-20). Team planning was especially important in school 5 ("Gemini"), where the teachers seemed to be never making a move without the other – until the new curriculum changed their expectations (EPR/a-1, 2, 8, 19, EPR/b-9, 25, 26, EPR/c-1). In very rare instances did this team-planning effort spill into team-teaching, however. Only two instances occurred where teachers actually switched classes – the first (JOPR/c) was a success because each teacher had specific knowledge to impart and each knew the students well. In the other instance (MPU/f), however, the two teaching styles clashed and the experiment appeared to be a failure (see p. 285).

School Organization and Events

There was some indication that the actual organization of the school (programs and special events) had a certain influence on teachers. Specific integrated programs were mentioned

as being an important formalized way of keeping the teachers from recidivating back to a traditional disciplinary system (see context concerning school 6 [Integrated Arts] and school 8 [Integrated Studies]). However, as will be seen in Dimension E, whether the schools were based on a rotary system or not, teachers seemed to have had little inspiration to perform any large-scale integration activities (such as an integrated day) on a regular basis. Rather, cross-class or school-wide activities were saved for special, short-term events. These included field trips (EPU/b-13), masses (MCR/f-33, 34) extracurricular activities (MCR/f-36) and celebration days (ECR/b-26, MCU/b-24). It was only in school 7 ("Retrospective"), with their seaway project, that an integrated activity would last more than a week (JOPR/b-38, JOPR/d-20, JOPR/e-10, JOPR/f-6).

A few teachers mentioned the physical structure of the building. They extolled the virtues of the small size of the school (ECR/b-19, 20), the central meeting areas for public discourse (MCU/c-9, 10), and a unified JK-OAC school (JOPR/f-23) as creating an atmosphere conducive to integration. Surprisingly enough, all teachers at the open concept school appeared to feel that its open shape inhibited integration (see context, school 3 – "Open Option").

Classroom Inspiration

Above all other influences, teachers strongly indicated the importance of classroom experience in shaping their teaching methods, especially the way they integrated the curriculum. Most said that it was only though their personal interaction with students, finding out what worked and what didn't at the personal level that they were able to solidify their beliefs. Through day-to-day events, they argued, that meaningful connections could be made between the various Ministry documents and the students' interests (MCR/b-245, MCR/d-2, 4, 5, ECU/b-9, 23, 25, 26, ECU/c-23, MPU/d-30, 31, MCU/c-28). An intensely personal activity, teachers concluded that the process should be left at the classroom level, unhindered by any outside forces who had a vaguer and more imprecise view of the circumstances (MCR/f-20, MCR/g-21, MCR/h-21, 26, 29, MPU/c-38, ECR/b-36, ECR/e-1, 24, EPR/c-1, EPU/f-8, 9, 15, 39). Even in the classroom, the

development of integrative skills was seen as something that a teacher could only approach slowly, in a stumbling *ad hoc* fashion (ECU/c-9, 16, 25, MCU/e-3). Through instinct (MPU/b-39, 42, 43), some inner desire (MCU/b-22), and experience, the teacher gradually perfects the craft of integration to eventually master it (MCR/f-27, ECU/e-10, ECR/d-25, MCU/d-42, 43, 45, JOPR/b-41) but never completely control it. One teacher aptly reflected the general sentiment of those interviewed:

> There is no great way to give direction with that. How do you teach somebody to integrate? I think it is an experiential thing that you learn as you go. What I'm finding is that, each year, you can make connections as you know more about education. And as you know more of what you're teaching - it's easier to make those connections - as opposed to a first year teacher who doesn't have that experience. You know, I'm still finding a lot of things that I'm learning and making connections right now and I'm sure that will continue for a long time. (MCR/h-26)

This feeling of professional freedom was supported by quite a few of the administrators, who left this aspect of the education process up to the teachers themselves, intruding only when asked (MCR/a-12, ECU/a-11, 12, EPR/a-19, 22).

Other Influences

Very few teachers made any mention concerning sources of inspiration outside of the immediate school environment (12 or 27.9%). Of this number, 6 indicated that they had gotten some training in curriculum integration during their years at teachers' college. This had varying effects on them – to some it was a very enlightening experience thanks to certain eloquent professors (MCR/f-23, ECR/c-23, EPR/b-23), while to others it was more an experience of having it "crammed down your throat" (JOPR/c-22) to little avail (MCR/e-25, MCR/h-25).

The teachers who expressed the greatest inspiration from this area seemed to all have had significant personal experiences that brought them to this way of thinking. In the case of teacher MCR/b, she had been greatly touched by the visitation of the two nuns and her discussions with a particular missionary. It had been a revelation and had given her a desire to change her teaching technique (MCR/b-7, 22). Teacher MCR/g had included much artwork in her class due to the

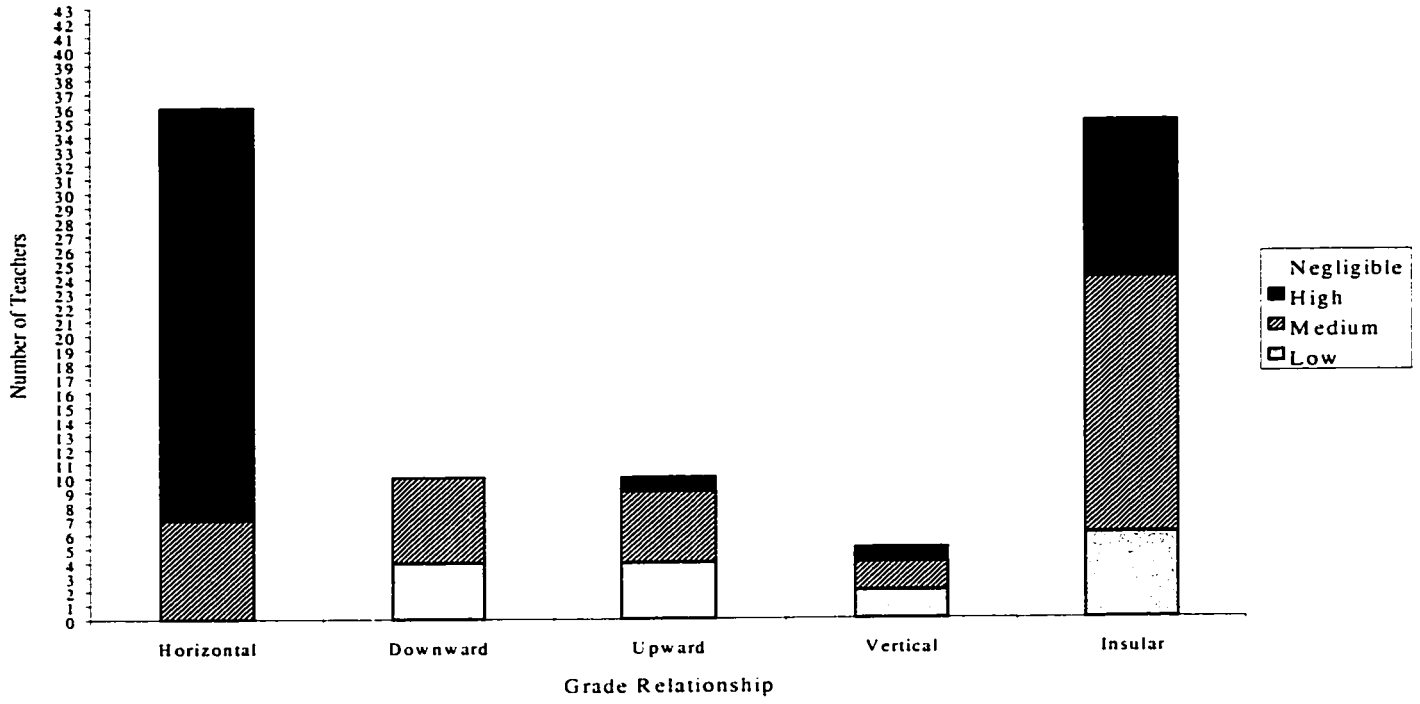
influence of discussions with her mother, an artist (MCR/g-26). The final three teachers had undergone radically alternative educational experiences – when they returned to the public system they found it difficult to go back to what they saw as traditional methods. One had been exposed to work stations where students were encouraged to be more active learners (JOPR/b-41). Another had spent some time team-teaching in Japan and had felt that it had made the students more motivated (ECU/f-26). The final teacher gave perhaps the most moving description of her inspiration – teaching with the Northern Cree in Alberta:

> Their life is a whole - they don't separate things into compartments. I had some Cree teacher aids ... that were coming from the States. You'd open the first book and there was a picture of the father going to work with a little briefcase. ... I asked them, "where is the father going, do you think?" "He's going to the hospital!" [laughs] ... they had a lot of TB cases (this was the 70s). The only time they saw a father with a suitcase was when he was going to the hospital in Edmonton, because he had to take the plane. I realized the irrelevancy of all these books. Their lives were so different. ... And everything was a whole. Their way of teaching was very much the mother and child or father and child approach. The holistic approach. I realized that this was how children learn, and how we learn, too, as an adult. So that's it ... "My dad killed a moose," [a student would say] So, we would take off and see the moose. (Today, of course you'd have a room full of permission slips) The mother was cleaning the hide. We would come back and we'd write about it. They would tell me what they wrote. ... Life was our curriculum. These were my best years. There was no strictures, no structures. Even physically, in my classroom - we had three doors to go outside to be with nature. Then I had the old man, the old servant coming to talk about beaver dams - we would talk about it then the kids would write about it. Everything was done naturally. ... It's too compartmentalized here. (EPU/b-27)

Analysis of Dimension D: The Relationship of Grades 7/8 to Other Grade Levels

Regardless of their situation (in Elementary or Middle school), it appears that the participants did most of their integration of the curriculum within the space of one year with one grade level (except those who were forced to teach a split grade). For most teachers, there appears to be little concept of a continuum, except for some contact regarding shared projects or outcomes with preceding or succeeding grade-levels.

Figure 11.7 - Relationship of Grade 7-8 to Other Grade Levels (Teachers' Perception)



*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

Horizontal

Almost all teachers in this study had been assigned to teach one specific grade level (either grade 7 or 8). They indicated that due to this fact, they carried out most integration activities within their one class and rarely created any multi-grade events. The administrator at School 6 ("Program Leaders") mirrored the situation at most sites:

> It's strictly grade seven material and grade eight material. There is a sharing of material and resources amongst teachers, but primarily the subject content with the curriculum is not merged and blended together. I am well aware, for example, that if you're teaching in a grade seven-eight split (that happens quite frequently in small schools) that there is a blending of content. But, there is no blending of content here (MCU/a-7)

While the smaller schools said that the same 30 students usually passed from grade to grade as a cohort (MPU/b-16, JOPR/f-12), the larger sites tended to separate them from year to year (MCR/c-2, MCR/d-1, MCR/f-9, 11, MCR/h-10, ECU/a-5, ECU/b-10, MPU/d-15, EPU/b-13, EPU/d-10, EPU/f-5). This seemed to have been done for efficiency sake - to keep the administration straightforward (MPU/c-17, 18, 20, MCU/e-13). One teacher said that she was sad because "they're really dispersed to the winds" when they leave her level, but looked on it as the reality of an urban school (MCU/b-10).

Downwardly Vertical

While all the schools in this study considered themselves elementary (as opposed to the secondary grades of 9 and higher), the participants made a surprisingly meagre amount of comments regarding their relations to the Primary or Junior levels. In fact, 32 (74.4%) made no mention of any grades below 7. This is not surprising in the Middle schools. As one teacher from School 1 ("Charitable") explained:

> [There is no real connection with] Grade 6 because it is a separate school and actually the kids are fed in from two feeder schools so even within the two schools there are different levels to start off with. From day one I feel like I'm starting from scratch. Usually I don't have a lot of contact with [the PJ teachers] other than about kids that are on a specialized program - that is the only information I get, and I hear the odd thing from parents. (MCR/e-9)

Therefore, beyond the very rare informal chat between teachers concerning problems in a particular student's progress (MCR/f-34, 35, MPU/a-8, MPU/c-20, 33), they seemed to indicate no reason for any contact whatsoever.

At the schools where JK-8 teachers were housed together under one roof, there was an expectedly stronger connection - but not as significant as one would anticipate. At each site, the administrator maintained a fairly rigid separation between divisions (Primary-Junior-Intermediate). The principal of school 2 ("Forces Base") said that even though the teachers may have some informal contact, he made it a point to schedule segregated meetings regarding curriculum (ECU/a-1) to accent the progression of students' education (ECU/a-4). Because of their proximity, a few grade 7 teachers noted that they would check with grade 6 teachers to see what they had accomplished by year's end (ECU/c-8). On rare occasions, a few even taught Junior-level courses (ECU/d and ECU/e). However, beyond occasional special events that may bring the school together to show unity, class-centred activities prevailed (ECU/a-1, ECR/b-12, 13).

Only two "specialty" teachers (French immersion and ESL) integrated Primary-Junior curriculum material into Intermediate level classes. They said that they had included these expectations to try to bring foreign or slow students up to speed (JOPR/d-9, EPU/e-8)

Upwardly Vertical

As much as the participants distanced themselves from the lower grades, they seemed even more isolated from the secondary level (see "balkanization" in Dimension F for more analysis). Here, 34 (79.1%) made no mention of any grade beyond 8. The site that was most closely related to the high school, School 1 (it was actually physically attached to one) acted as an insightful example of the middle school philosophy. Believing the connection to be a double-edged sword, the administrator thought it was an excellent opportunity for *teacher* interaction:

> Because we are fortunate enough to have 7 to OAC, there is a nice bridge between the 7 and 8 students and the grade 9. The high school teachers are able to talk to the 7 and 8 teachers on how to learn best and what is their best learning style. If a teacher is having problems in a certain area, other teachers can make recommendations and suggestions (MCR/a-2)

This is supported by a teacher who said that he tried to tap into secondary resources (which he considered superior to middle school) as often as possible (MCR/d-11). Both explained, however, that this link did not extend to combining classes or even allowing the students from the two divisions to intermingle in any way:

> No, we keep the two schools separate and that's a concern parents have when they first come here in grade 6. They fear that the high school kids will be hanging around the elementary [area]. So, you are right. In that aspect, they are very much separate. (MCR/a-3)

> There are reasons for being separate ... parents have some real concerns about grade 7 or grade 8 students mixing with high school students. Rightly so. There are a lot of things that they can get exposed to. The other reason to do it is - high school students really don't want to go to a place where they are hanging around with 7 and 8's. There is a sense of identity. It's kind of tricky. In terms of classes, there is some mixing of projects but for the most part I think we operate as two schools within one. We share some things, we do some things together, but I think our idea is that the elementary pretty much have a part of the school that they stay in and high school kids shouldn't be in that part. So, it's pretty much separated. Just think about the administrators - it's better this way. (MCR/d-12)

Therefore, while some events (like assemblies or joint-masses) may unite the two schools (MCR/d-12, MCR/f-18, 33 to 35) they were looked upon as neither children nor high-schoolers yet.

Most other schools had even less contact with the secondary system. While the principal at school 3 ("Open Option") said he was trying to form some links to high school (MPU/a-8), most teachers who bothered to deal with this issue simply dismissed it as a different school "with all different philosophies" (EPU/b-13). While, they believed it was their duty to make the student ready for their next level, the teachers felt that their responsibility ended when they moved on to grade 9. One teacher explains

> I might meet a [high school] teacher and say, "how's so and so doing?" or I think our guidance councilor keeps in touch more and keeps an eye on the kids who maybe have resource problems or kids that have behavior problems. The general average student goes on and we probably have very little contact, unless we meet the students themselves. But the actual teachers - no. It's a separate entity - but it's also preparing them. ... You know, it's a preparation area for them. (MCU/e-15 to 16)

Some participants had individual concerns about preparing the students for high school beyond the demands of the Grade 7-8 curriculum. In school 2 ("Forces Base"), one teacher said that he had taught at higher grade before (ECU/e-10) and was interested in sharing higher level content down to give the students a head start. Other participants (MPU/a-8, MPU/c-19) echoed this sentiment. Some treated the students in a more adult fashion or changed subject areas in a rigid schedule every day to prepare the students for high school (ECR/e, JOPR/f-20). These approaches were more based on teachers' conception of what the secondary experience would be like, however, than on first hand contact.

Completely Vertical

Having found a niche at the grade 7-8 level, an overwhelming number of teachers (38 participants or 88.3%) just never considered the school system as a continuum from JK-OAC, beyond a vague concept. The only school that was really able to see the span of 14 years was school 7 ("Retrospective"). Proud of the uniqueness of her school, the administrator said that she had tried to find various ways to pull the entire system together as a unit. She and her vice-principal each took turns dealing with elementary and secondary divisions to get a broader view (JOPR/a-15, 16). There were also several committees functioning at that school that superceded the divisional set-up to deal with computers, healthy lifestyles, and the school environment (JOPR/a-14). Finally, she said that she had hired specialty teachers, such as in music, to teach grades 1 through 12 in order to ensure continuity. She added that when there was no dislocation between the grade or divisional levels (as seen in most schools) there was no need to play "catch

up" each time a student made a transition (JOPR/a-5). Each teacher agreed that this method had it pluses and minuses – because the principal had to deal with large rotary chunks involving 12 grades, there was a reduction in flexibility for *ad hoc* events. However, teachers and students were able to see the whole span of the educational structure and always had the end goal in mind (JOPR/e-1). As one teacher commented – they were "all on the same wave length" (JOPR/f-23) and saw public education as a continuum (JOPR/f-13).

Insular

In many cases, there seemed to be a strong connection between the grades 7 and 8, although the link may be rather implicit at times. For most teachers, the actual act of teaching was relegated to one class at one grade level. However, to ensure that there were no gaps or overlaps in the students' progression, most participants mentioned that they did long-range planning (or at least some informal consulting) with the teacher from the preceding or succeeding grade level (MCR/a-2, MCR/d-10, MCR/f-9, 10, ECU/b-10, ECU/c-8, MPU/c-12, 19, ECR/b-10, ECR/c-19, ECR/e-9, EPU/b-11, EPU/c-12, 13). One teacher discussed the importance of teacher communication thusly:

> With grade 8 teachers, I do talk to them a lot now just to see (because of all the new curriculum) where they should be next year, like what kinds of things could I be working on. Some of them have come up to me with suggestions for the new curriculum. ... What suggestions do you have for us? What do you want us to work on? And so, in that sense, we try to give students steppingstones. I want to feel confident that by the end of grade 7 they could go into their grade 8 curriculum and be ready to learn more. So, that's a goal that I have as well. (MCR/e-9)

Two schools even had mandated divisional meetings to make sure that consistency of expectations was maintained, and to look at how resources could be shared (ECU/a-4, MCU/c-8, MCU/d-12).

A number of teachers had undergone the experience of bouncing between grade levels. For the generalist teachers it was exciting to see a broader spectrum and the vertical connections,

but they also felt that it was stressful having to relearn quite different guidelines and expectations (MCR/c-2, MCR/h-8, 9). This practice was, in fact, insisted upon in school 6 ("Program Leaders"). While the grade levels were kept separate (MCU/a-7), the administrator boasted the fact that most of the teachers were well versed in the various curricula:

> You'll find that many of our staff here are experienced with the curriculum for seven and eight, because over a five year period (and I use that as an example) you could have one particular teacher who spent two years teaching grade seven, three years teaching grade eight and they have what we call a mixed timetable (that they have some seven content and some eight). So there is a natural bridge throughout there. (MCU/a-8)

Only two teachers in the study mentioned that they actually kept the same students over a two-year period. The first was one of the only Tech teachers in school 7 ("Retrospective") and treated the arrangement as simply a matter of course:

> During the first few years of my teaching, I was Design and Tech - so I had them in grade 7 one year, and then in grade 8 next year. You had to try to work in progression there - so I've done that. [do you think of it as a two-year program?] Yes, whenever I was laying out my Design and Tech course it was laid out as a continuum from 7 to the end of 8. (JOPR/c-6)

The other, a French immersion teacher in school 1 ("Charitable"), had high praise for the practice, saying that she was able to plan more consistently and see student development:

> You see I have my students for two years and it's wonderful. You can build on the skills and knowledge that they learn in grade seven, and take it one step further. I would really argue in favour of that. ... They know what your expectations are and then you can raise those expectations according to the grade level, you know, and take it one step further, so they see the growth themselves. (MCR/g-6)

A few participants said that they supported the "Transition Years" concept, believing that it was a quite distinct phase of a child's development. A separate school was necessary to deal with the particular issues that were prevalent at this time. Specifically, they mentioned the importance of zeroing in on the social aspect (ECU/c-5), the development of responsibility (JOPR/b-16), and the general problems of early adolescence (MPU/a-1, MPU/b-20). Two administrators expressed great admiration for the "Transition Years" documents, as they

pinpointed the needs of these students (MPU/a-8) and the problems of an omnibus curriculum from 1-12:

> I've found in Ontario that the grade seven and eight have been the wasted years. ... Very often it was a holding pattern for these children. They did not move them along. It was, sort of, like the brain dead time, you know. ... I think the Transition Years at least made people talk to each other - seven through nine. I think they recognized that there was a problem seven through nine (JOPR/a-3).

Changing Views

The new curriculum appears to have had a significant effect over the way some individual teachers and schools have approached inter-grade communication. In general, teachers have commented that because the guidelines now lay out concrete expectations in a grade-specific fashion, they have less reason to discuss curriculum with other grade levels for clarification. As well, two sites (schools 4 and 5) that had been rather experimental in this area seemed to have become "more horizontal" due to the new guidelines.

School 4 ("Lone Scholar") had instituted the system of split grades (teachers being responsible to teach 2 grade levels in the same classroom at the same time) under the Common Curriculum. The teachers said that they had been able to quite easily blend the outcomes at the time and teach a unified class of 30 students. However, in the past year with the entry of the "rigorous curriculum" and the vastly different expectations for grades 7 and 8, they now had to treat the class like two different sections of 15 students at one time (ECR/a-1, ECR/b-10, ECR/c-10, ECR/d-14). While the teachers seemed to have few negative comments about the documents themselves, they found that its use in the present situation had put them in an almost untenable position (ECR/c-9, ECR/d-8, 21, 33, ECR/e-11). The principal, whose mandate was to maintain the split-grade system at the school, seemed to be fighting an uphill battle against the Ministry and her teachers, who were questioning the split-grade approach:

> The reality is - you have split grades because you have numbers. There is a reality of putting 25 kids or more in a classroom. So teachers feel strongly that they want straight grades at any cost. Teachers are saying "I'd take 35 one straight grade", and it's only because of the curriculum right now. The government has made integration difficult. They have not considered that, and it is really too bad. Probably with better curriculum writing we'll get good resources that will pull out the important skills across those units. That's what we're looking for. (ECR/a-3)

School 5 ("Gemini") went through an even more radical transformation in recent years. Under the Common Curriculum, the Grade 7/8 teachers had been able to treat the two levels as a continuous grouping, and plan thematic units that spanned this period. With the advent of the new guidelines, however, these multi-grade themes became unviable, to be replaced by more solitary forms of integration. Teacher EPR/b explains the metamorphosis:

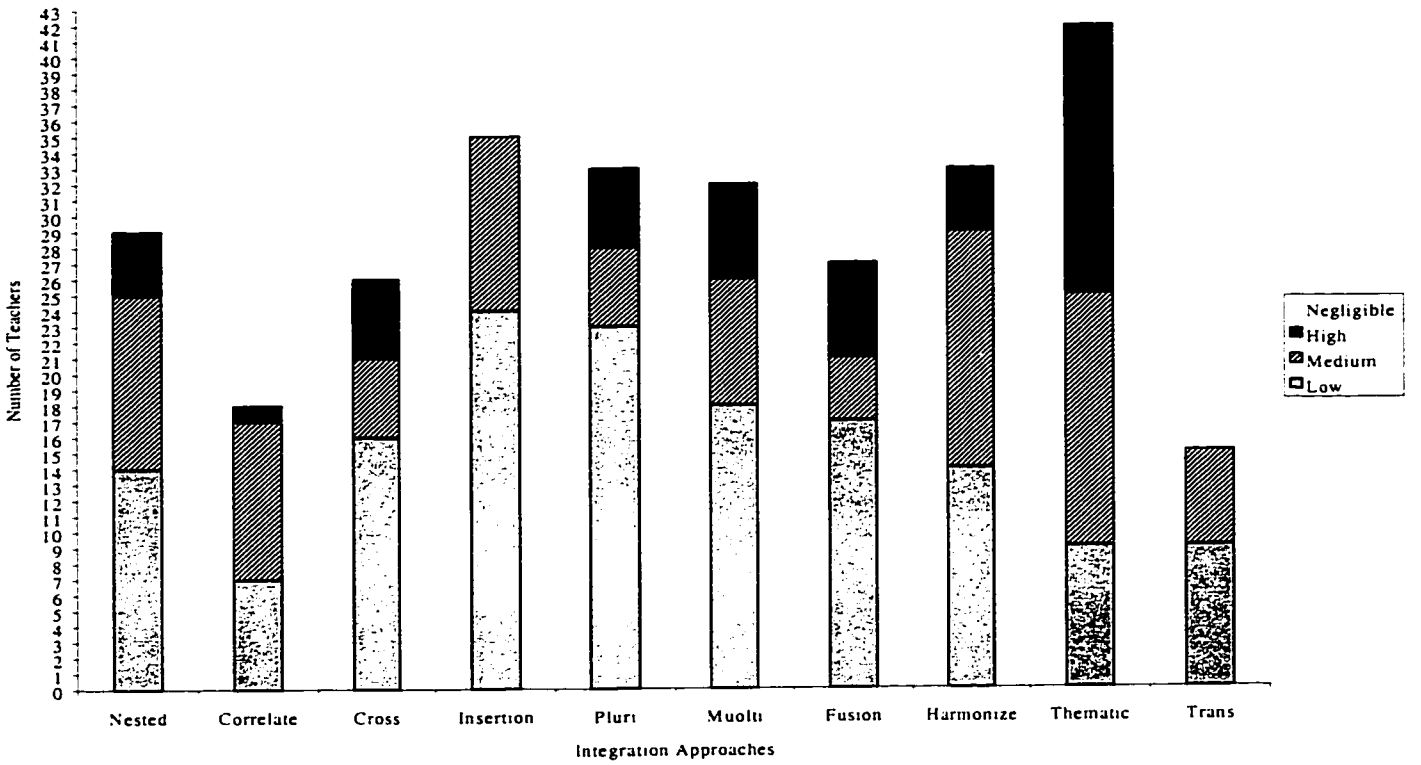
> Well, when we did the Common Curriculum, my gosh - the grade 7 teacher and I were team-teaching almost - even though she had her grade 7 class, and I had my grade 8 class. We used to put things together, she would have half of a lesson, and I'd have the other half and we would say together, we are one heck of a teacher. This was because we could do that - but with the common curriculum you had that time to do that. You went from grade 7 to grade 9. So, as long as they covered these expectations, it was fine. In this new curriculum, that can't be. I mean, the new curriculum has outlined these expectations so specifically - what is covered in math in grade 7, is not touched again in grade 8 - it's something different. So there's no real continuum in this new curriculum. (EPR/b-8)

At the time of the interviews, the two teachers said that they had retreated back into their isolated (horizontal) classrooms and although they still remained great friends, rarely spoke to each other about curriculum anymore (EPR/a-1, 3, EPR/b-8, EPR/c-8, 9). Teacher EPR/c was acutely aware of the tight-fitting situation she was now in. While before she considered herself a flexible grade 5-9 teacher, she now she felt quite locked into the role of a grade 8 specialist (EPR/c- 35).

Analysis of Dimension E: Integration Approaches Used by the Teachers

While the participants' views on the various approaches varied greatly from school to school and individual to individual, some general patterns emerged. The chart below (figure 11.8) shows the overall approaches favoured by teachers. However, the reader should look at Appendix H to view the broad scope from school to school.

Figure 11.8 - The Importance of Integration Approaches (Teachers' Perceptions)



*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

Nested

Almost all participants said that they made preparations to place their subject-based courses into some meaningful and systematic order.[1] However, whether this approach was

[1] The exception to this was school 8 ("Inner-city Innovators") – none of the teachers taught an individual subject course but a formalized Integrated Studies program.

considered "an integration method" or not depended greatly on the teacher's circumstances. Those who were doing much higher-level forms thought it to be basic common sense (MCR/b-19, MPU/a-22). Others simply remained silent on the issue (see MCR/a, MCR/e, ECU/a, MPU/d, MCU/a, JOPR/d).

A significant amount of teachers tied this form to the new curriculum. They said that each guideline they received was broken into a number of separate "strands" of knowledge. They read it over and then endeavoured to arranged these strands in a logical order within the course progressing from simple to complex ideas (MCR/g-17, ECU/e-10, MPU/a-18, ECR/b-29, 30, ECR/d-22, ECR/e-20, MCU/e-30, JOPR/e-14). The following teachers explain the process:

> I will jump between, let's say, chapter 3 and chapter 11 and then come back again, because it links this strand and this strand and this strand. It just goes better together and it follows some pattern that is going to make sense to the kids. (ECU/c-19)

> We do some number work and then we move on to measurement and then to geometry and patterning. I think it's good, because it gives them a bit of a variety, but you do have to, hopefully, build and build the skills and use what they have learned. I can still remember my grade 9 math teacher talking about math is like a sand pile - you have to build. I still remember that... (ECU/d-16)

> The nested approach - making it meaningful and taking all the little steps and at the end you get this big project but everything comes together. We start off very slow in September with just a process of writing a paragraph or doing a chart or doing a very simple lab. Then we keep adding, and hopefully, the student at the end of all of this will know there is a reason and there is a definite pattern to why he is doing it this way. Near the end of some of the labs, I have my grade 7 students handing in stuff that is very, very impressive and I get a good feeling. You can take the labs and see the steps that they've done - step by step, putting everything together. But that may take until almost February before we get to this level. (MCR/f-18)

A number of teachers said that they were struggling to make logical connections even within the subject guidelines.[2] Most felt that they would overcome this problem through careful planning (MCR/c-13, MPU/c-30, ECR/c-1, 20, JOPR/c-10, 11), working with the subject over time (MCR/h-18, ECU/b-20, ECU/d-16, ECU/f-22, ECR/a-13) and "creative shuffling" (MCR/d-20).

[2] The two issues of rigid curriculum documents and speedy implementation are dealt with in more detail in Dimension F.

What seems apparent is that the approach was usually the first form of integration used by new teachers or those approaching a new curriculum. After the connections had been made within a subject area, however, teachers then began including material from other disciplines and leaping to higher forms of integration. The principal of school 7 ("Retrospective") was the most open about the nested approach, and its use as a springboard:

> I see it particularly with new teachers. That's all they can handle when they start. But they grow. I mean, once they've learned how to teach that particular subject then they can move on to doing more integration involving other things. (JOPR/a-20)

Once teachers have moved on to a higher level, they appear to become rather frustrated with any return to this form, equating it with retrenchment and personal defeat. This was especially the case in school 5 ("Gemini") where all three participants mentioned their plight with some embarrassment (EPR/a-1, EPR/c-21).

> Unfortunately, right now that is what I'm doing and I'm not enjoying it. I don't like it, I don't think the kids get as much out of it. Yeah – I'd like to do more, but I have to understand... I have to get this down more before I can really go with it. (14B-19)

Correlation/Insertion

The line between these two forms of integration was almost totally blurred by the participants, who felt that the distinction between them was too fine. Quite simply, most teachers said that from time to time they have included information from outside a subject area into the general flow of the course. Sometimes, they indicated, this was just a phrase to jog students' memory and show relevance. At other times, it consisted of larger sections of material taken from other curriculum documents to borrow time from one class to give to another. This was not considered by most teachers as a radical form of integration but rather as just a natural outgrowth of the nested approach - once a solid disciplinary form had been firmly created, then filaments could be launched out to other subject areas. In theory, one would assume that the intensity of

usage would depend on the teaching structure (rotary or homeroom). The teachers' interviews tell a different story, however.

The Rotary Schools

While each principal had high praises for its merits (MPU/a-3, MCU/a-3, JOPR/a-1), there appeared to be little incentive in the rotary system schools (school 3, 6, 7, 8) for teachers to engage in this practice in any large-scale sense. In each site, teachers were given a set number of subject-related expectations to fulfill and unilateral cross-overs (whereby one teacher just decides to insert material from another curriculum) were "definitely not a school wide policy" (MPU/a-19). Even the principal of school 7 ("Retrospective"), who was extreme in her belief that correlation and insertion should be brought into the mainstream of education and made systematic, had to admit a two-week special project was the best she could accomplish with the present rotary system (JOPR/a-1, 22).

The teachers, as well, seemed somewhat hesitant about correlating or inserting information or expectations from other courses – especially the courses that were taught by others. Most said that they did it only incidentally - including a novel into history (MPU/d-21, JOPR/e-16, JOPR/f-19), atlas work in math (MCU/c-20, 22), dance in Physical Education (JOPR/c-2, 13), and references between subjects (JOPR/d-2, 9). They were quite specific about their reasons for holding off on this form. Primarily, it was the unessential aspect of this form that made some teachers recoil. While many said that it would be nice to insert a fun novel in here or a science lab there to interest the students, it was impossible due to amount of prescribed material they had been mandated to teach (JOPR/d-15, EPU/b-19, 23). Teacher MPU/d said that each teacher had their specialty and should stick with it (MPU/d-22). Teacher JOPR/b, a little more timidly said that she was afraid to "step in anybody else's territory" (JOPR/b-23). She added, however, that she was suspicious the form may just lead to gratuitous and illogical connections (JOPR/b-29, 36) - "you're not integrating – you're just touching" (JOPR/b-26). Only

teacher MCU/e seemed to have no qualms about inserting some geography and math into her science course (MCU/e-5, 19). However, she said she was able to do this because of the leeway given her by the science guideline (MCU/e-21, 26, 27).

Even the teachers who kept the same students over a number of courses seemed disinclined to make too many connections. Teacher MPU/c said that although she taught English, History and Geography to the same students she would make only incidental insertions (such as grammar into history), believing in the importance of structured time for effective lessons (MPU/c-5, 12). Another teacher suggested that this form of integration was perhaps more suitable for higher education (MCU/d-29).

The two teachers who were attracted to this form said that they did this to transmit personally important information to the students. Teacher MPU/b said she would introduce a lot of real-life material into her art class (MPU/b-14, 30). However, she admitted that she did not plan for this – neither did she look to any other guidelines for her source. She simply included the material based on her own instinct and discretion (MPU/b-30, 37, 39). Teacher MCU/b said she also included a lot of unprescribed material - all related to the multiculturalism issue - wherever she felt it was appropriate (MCU/b-1, 20).

The Homeroom Schools

As in the rotary system, the administrators of these schools (1, 2, 4, 5) were highly supportive of this method of integration (ECR/a-11, ECU/a-8), praising it for its practicality. They were also quite aware of the importance of the homeroom system in enabling that to happen:

> You almost don't have enough time to teach each stream. What the teachers have found is that maybe they are going to do the data probability in science and not in math. So, for all that is covered in the science curriculum a mark has to be reflected over in the math column because that's where the Ministry expects you to report it. ... there is a lot of that crossing over into different subject areas. It just naturally has happened. (MCR/a-7)

What was most striking about the interviews of these schools, however, was that while much more formal freedom was given to the teachers to perform this kind of integration, they rarely employed it in any systematic way. In most cases, teachers said that they would only make connections between subject areas or to real life incidentally, when a glaring connection hit them. Otherwise they would not search for them (MCR/c-10, ECR/b-24, EPR/b-16). In most cases, they referred to the exact type of examples seen in the rotary system. This would include the insertion of the occasional reference into a class discussion, a quick dramatic presentation in history, or guest speaker (MCR/e-3, 13, 17), the use of maps into history class (MCR/h-12, 13, MCR/g-14), science-type examples in mathematics (EPR/c-18), or a little history in English class before teaching Shakespeare (ECR/c-17). Teacher ECU/c is probably representative of the majority of teachers when he says that connections are simply made by "just stumbling onto a book or something, and saying "hey, I've read this and this would fit in here" (ECU/c-14, 16). Some said they just hadn't stumbled over any yet but were open to suggestions (ECR/e-18, ECU/f-17).

A few teachers seemed interested in using this form in a more intended fashion, and inserting a novel into their long-term plans a few times a year in the hopes of making the classes more lively and allowing students to see connections. (ECR/d-19, ECU/d-13, 20). Teacher MCR/f, the most aware of the valuable connection between the homeroom system and this form of integration (MCR/f-13), explained:

> I like the definition of insertion because it's taking one certain subject area and one other small section that you just like to add in there - so you're not overwhelming the students. Say, as we're doing this, let's take a look at a certain sector in math (I always seem to go back to making charts) - in the science we're going to take a look at math and making charts and how to organize a page to do charts. That also incorporates proof reading and putting notes in point form in English. So that just inserting little sections of each subject area into one project and putting it all together. (MCR/f-18)

In most cases, therefore, the teachers maintained a rather disciplinary hold over their classes, whether they were given the freedom or not. As long as the teachers felt that a disciplinary pattern was the norm at their school – they maintained it. The only difference between the two systems seemed to be their excuses for doing it: in the rotary, they blamed the structure of the class system; in the homeroom it was the rigidity of the subject-based Ministry expectations.

Harmonization

In each of the Homeroom schools, a weak harmonization was utilized by a number of the teachers. In the three Catholic schools, religion/values were said to permeate the various subject areas. However, the intensity of this form varied from teacher to teacher. While some were quite adamant about its place throughout the curriculum (MCR/b-14, ECR/a-10), others were more circumspect about its uses (ECU/a-13, ECU/d-12, ECU/f-16, ECR/b-23). Some found it quite difficult to do with any consistency (ECR/e-17). Teacher ECR/c was quite upfront about how religion was approached in the school:

> Yes, it depends. If you're getting into math and you're taking the Christian underlying theme of values and beliefs as it pertains to Catholicism. In certain areas where it is relevant - when you get into family life, religion even health and those kinds of things and maybe perhaps to a certain degree when you get into some of the things like science and discussing that. Yes, I would see that. I bring it up incidentally. (ECR/c-16)

All the homeroom schools made some mention of promoting good writing and reading skills in all their courses. They said that they managed to accomplish this by keeping marks for written assignments in each subject. That way, it remained under the surface, was not obtrusive and "crept in naturally" (ECU/b-3, ECU/c-14, ECU/d-12, ECU/f-15, ECR/b-22, ECR/c-1, 3, ECR/d-12, 18, ECR/e-17, EPR/a-15, EPR/b-14, EPR/c-17). Teacher ECU/b seemed to strike a chord when she said that this approach was not a priority, but "to me, it is just out of necessity" (ECU/b-17). Of course, for many teachers, uniformity was not completely obtainable - in some

areas (like science and math) language skills became of less prominence (MCR/f-4, 14, MCR/h-14). However, many believed that a base-line of skills should be maintained by all teachers (MCR/f-3, 12, MCR/e-16, MCR/d-17).

It was made quite obvious that harmonization in the rotary schools was a near impossibility. The principals remained hopeful that the 3 Rs would be reinforced by teachers in all subject areas (MPU/a-18, JOPR/a-24). However, most teachers said that due to the fact that they only taught a few subjects, any approach that comprehensive could not be attained (MPU/b-29, MPU/c-26, JOPR/b-37, MCU/b-21, MCU/d-28). Even teacher MPU/d, who tried to keep a constant set of ethics said that she did this in an extremely informal fashion (MPU/d-20). The one skill that seemed to be promoted, to some extent, revolved around the computer (see Dimension A). Because a large amount of money had been earmarked for the purchase of computers, they had ceased to be thought of as novelty items (MCU/a-10, JOPR/c-19). In school 7 ("Retrospective"), there were enough computers in certain classes to match the number of students, thereby making it a vehicle rather than an object of study each (JOPR/f-1, 26).

The participants who promoted harmonization most highly were, quite naturally, the French Immersion teachers. They each said that rather than making French an object of study, when they had the students for the day, they merely used it as a vehicle to approach all other subjects (MCR/b-13, MCR/g-10, JOPR/d-11 to 14) - "It's a total experience" (MCR/g-13).

The Crossdisciplinary Approach

The people who made strong use of this approach, in actuality, said that they had wanted to harmonize. However, because they were trapped in a rotary system they used cross-disciplinary as a stop-gap measure for the while - it was the best they could do. The prime example of this was the core French teachers who still tried to use the language as a vehicle in

teaching other things - a one-class history lesson, for example (MCR/b-12, MCU/d-35, JOPR/b-1, 28).

Other teachers used this approach when they were especially interested in one area of the curriculum. Principal JOPR/a explains:

> I see this in teachers who have a real passion for their subject. They do a lot of crossdisciplinary stuff, like - it's the art teacher who tells you that art is everywhere, okay, and they make sure the kids know that art is the only way to go - and it is life. It's the music teacher who sees music in everything, and if they have a passion for their subject then they do that automatically. The generalist doesn't. That's the difference. (JOPR/a-21)

In essence, she described teacher MPU/b, who had a "passion" for the visual arts. She used it as a vehicle to reach other areas of the curriculum such as science and math (MPU/b-14). She also used it to allow students to reach higher though processes in general (MPU/b-27).

> There is an orientation or a concentration that I am working on that day. It's not loosey-goosey. Like, tomorrow, for instance, we're doing art all day. But it's amazing what's in there. We bring in all types of skills. [like math skills?] Yeah, yeah. There's science. I'm lucky. I got to work with this artist. It's only one class but - you name it. I should write it up. It was a kind of fluke. It's amazing. We've had one day so far. And we've got language, we've got science coming out of there, we've had a bit of history coming out of there. But you see, none of this was planned, eh. But I knew it would happen. (MPU/b-39)

On the whole, however, most participants who used the crossdisciplinary approach, did it simply to interest the students. To put a human face on science or math, for example, teachers said they would give a lesson on the "history of the inventors" at the beginning of the unit (ECU/b-12, 13, 30, MCU/e-24, JOPR/f-17). One teacher explains:

> And, the science curriculum is so much more intense. We would do something like the history of force - "where did force come from? Who was Newton? Where did all this stuff come from?" So, not only did we do some history, and we would integrate some geography into that as well. So I think that one we do a lot - or we did a lot - we haven't done it lately. This is especially important when you are introducing the different curricula. (ECU/f-13)

Others would teach math or science through art (showing angles, drawing what you see through a microscope, etc). This would attract students with a different bent to the subject (MCR/f-14, MCR/g-1, ECR/d-1). Art, music and drama could, in fact, be applied just about everywhere (MCR/d-4) to "spice up" religion class (MCR/e-20), English or history (ECU/d-2, 7, 9, ECR/b-8, 21, MPU/d-18). One teacher who had the students all day said that, for her own interest, she would slant an entire day more towards a particular subject area (ECU/b-3, 19).

Quite a few people felt that this was an inappropriate form of integration at the elementary level (either through criticism or silence). The ones who voiced complaint indicated that this approach may be better suited for higher secondary or even post-secondary settings (MCU/a-11, 12). Some felt it could be a problematic approach in that it could allow teachers to dwell on their specialty and become increasingly irrelevant to the students (MCR/f-15, MCR/h-12, MCR/g-11).

The Multidisciplinary Approach

From the literature and what the participants had said in the other dimensions, it would be assumed that the homeroom teachers would do a fair amount of coordination between their subject areas, while the rotary would engage in more interaction with their students' other subject teachers. This did not seem to be the case, however.

Homeroom Schools

The principals, on the whole, said that they saw a lot of teacher interaction. However, they could not fit it into the truly multidisciplinary category of two teachers aligning coursework on an ongoing basis. Rather, they saw the teachers creating long-term plans together at the beginning of the year and then going along their separate paths (ECU/a-15). The Vice-principal of School 1 ("Charitable") commented:

> I find the teachers do a lot of their planning together. They are going to cover a lot of the same material together and they share their materials, but I haven't seen a lot of two teachers drawing connections - of course, it could happen and I wouldn't be aware of it. (MCR/a-9)

This is supported by almost all of the "generalist" teachers. They said they initially planned together (MCR/c-14) and informally shared a few ideas, timelines and resources (MCR/d-26, MCR/f-9, 10, ECU/c-8, ECR/c-19). The teachers at school 1 said that for the science course, each teacher created a unit and then they traded them (MCR/c-14, MCR/f-9, 31). In only two instances (mentioned earlier in Dimension C), teachers engaged in any form of team-teaching to varying degrees of success (MCR/e-18, ECU/f-10). In most instances in this environment, teachers chose to relate their courses on an individual basis (ECU/b-9, ECU/f-20, ECU/c-18). Even in ("Gemini") school 5, (as mentioned previously in the earlier sections) the two teachers had aligned their courses only when they had the leeway afforded them under the Common Curriculum - they now only made connections in courses they themselves taught (EPR/a-17, EPR/b-8, 18, EPR/c-16).

While some teachers came upon connections by accident, as with correlation/insertion (MCR/d-19), more participants said they actually did some planning to make the two courses relate to one another. In most cases, the teachers taught a concept in one class with an accompanying activity in another, like an event in history and role-playing in drama class (MCR/g-16, MCR/h-13, ECU/b-2, ECU/f-19) or aligning geography and science courses (EPR/c-20). Teacher ECU/d says that this is what he would like to do the most:

> This is an approach that makes sense. This is just being considerate to the students. If you bounce back and forth in history, such as doing the Elizabethan period in History, then something totally different, and then months later you are back to Elizabethan in English and vice versa, it becomes confusing for the students. If you can hold off on one subject, and adjust your timetable and your schedule so that they coincide, I think that only makes sense. And I would certainly, as I become more comfortable with the curriculum, adjust to this approach. (ECU/d-15)

The final word on this area, however should be left to teacher MCR/h. He is quite clear about the uses of the approach, and its limitations in the homeroom environment:

> Because we're teaching most of those subject areas, it's not like I would connect with another teacher. Perhaps in planning this within your own classroom, it is something that you may want eventually to happen - to make connections between two subject areas so that you reach kind of a final point together, and the students can see that connection between the two. But in terms of doing that outside of the classroom with another teacher that is not something that would work here. The way our elementary system is set up here it wouldn't really be an option." (MCR/h-17)

Rotary Schools

Remarkably, this environment appears to have given even less impetus for the multidisciplinary approach that the homeroom. When interviewed, almost all the teachers said that while they may have informal chats with other subject-specific teachers, they preferred to integrate their subjects based on their own initiative (which meant little more than the nested approach). Even where some team planning existed to eliminate duplication (MPU/a-4), teachers did not regularly interact to coordinate coursework (MPU/a-21, MCU/b-18) but used planning time by themselves (due to government mandate, this time is shrinking).

The interviews at school 7 ("Retrospective") were very insightful as to the cause of this reluctance. The principal said that she tried to encourage teacher interaction (JOPR/a-5). However, due to the Ministry documents, the rigid disciplinary set-up that had been set up in the schools for generations (JOPR/a-25) and the traditional mindset of the teachers and community (JOPR/a-26), teachers felt more secure teaching their little sub-set of the entire curriculum. The other teachers agreed with the lack of enthusiasm among the staff for group endeavours outside of "hall chats" (JOPR/c-14, JOPR/d-1, 2, 17). Teacher JOPR/e was eager to have a multidisciplinary approach set in place at the school. However, she said to do that teachers had to be mandated - forced - to do this, and she did not see this happening (JOPR/e-2, 17). Two other teachers gave a more practical reason for not doing it. They said that they would occasionally

switch classes with one teacher if their expertise was needed (i.e. computers), but the rotary system was so intricate they could barely keep track of their own schedule let alone start dealing with other teacher variables (JOPR/c-17, JOPR/f-22, 23).

Some teachers kept the same students for two subjects and they did make some attempt to coordinate the two courses, usually through some "thread", like an event or skill (MPU/b-32, MPU/c-1, 2, 29, MPU/d-3, 22, MCU/c-22, MCU/e-29). However, even this was not as prevalent as would be expected. The one teacher who said she had done this type of integration on a regular basis had a confession to make:

> If I would teach history, I could teach the history of Confederation and in their language arts they would produce a newspaper of Confederation. Then we would have the French teacher and history teacher together. [have you done that?] In this school? ... No. [have you done it in another school?] In the secondary school, yes. Mainly between History, French and French Geography and Social studies. (MCU/d-30)

Even the teachers at school 8 ("Inner-city Innovators"), who did perhaps the most high level integration of all the other sites, admitted to having very few actual links with other teachers. On the whole, there were no co-planning or joint projects, just the occasional and tentative chat to see how the other person's courses were going (EPU/b-26). They would share resources when asked (EPU/c-14, 21), or talk "to keep things straight" (EPU/d-5, 10, 17). The informal "master" of integration, teacher EPU/f, explained that meetings or formal planning were simply unnecessary - they had just been doing it for so long that everybody knew what was going on (EPU/f-6 to 8). The one exception to this was the planning of joint field trips at the end of an integrated unit. One teacher would decide to end off a unit on "pioneer times", for instance, with a trip to Upper Canada Village. He would then relate this to the other teachers, who would then tailor their courses appropriately over the next few days. All the classes then went *en masse* for economy sake (EPU/d-16). Even the ESL teacher said that she would take advantage of the

opportunity and give her students a mini-lesson - "so that it wouldn't be a wasted trip" (EPU/e-22).

The participants who were the worst off (whether rotary or homeroom) were the specialty language teachers. They said that because of the language barrier and because their subject was segregated into a certain time slot, they rarely had contact with any other teachers. They described themselves as islands (MCR/g-18, JOPR/b-32, 34) or "one-man shows" (MCR/b-20). The ESL teacher said that she did much more team-teaching in the past but could not do this since all her ESL partners had been downsized (EPU/e-11, 21). She said that the only interaction she got with other teachers now is when they come to look at her projects on the wall (EPU/e-9). The core French teacher in school 1 ("Charitable") was in a similar state - she could not even have much discussion with the immersion teacher because their expectations and student levels were different - like two different worlds (MCR/b-18). The Principal of school 5 ("Gemini") saw this trouble with her French teacher and said that she was trying to make some informal links to the other courses - but it was quite difficult (EPR/a-17).

The Pluridisciplinary Approach

As elementary schools, most participants remarked, there was no real formalized system to deal with the curriculum. There were no departments, or school-based Curriculum personnel. Rather, in almost every school, there existed an extremely informal system whereby teachers could get support and advice on curriculum integration problems. In each school, a number of teachers had won a reputation for being better in certain subject areas (such as math, French, etc), based on background, education or interest. Colleagues who were weaker in this area would then seek them out for advice and support (MCR/e-4, MCR/h-10, 23, ECU/b-21, MPU/b-34, MPU/c-31, ECR/e-21 JOPR/c-16, EPR/a-18, 19, EPR/b-21). Teacher ECU/c gave the most accurate picture of the situation:

> We all have talents in certain areas and it comes out very quickly who has talent in which areas. You'll know, right off the bat, who is good at what. - You will know who to talk to - they just give off that aura. If you want a play put on in the school you know the person to do it. If you want something organized, well, this is the person to do it. There is somebody to ask for math help because they will have a really great grasp on math concepts. We will go to this person. We certainly, under the covers kind of thing, know who to go to for certain areas. (ECU/c-20)

These people got the privilege of keeping the subject resources in their homeroom. The administrator said, however, that this was due as much to lack of storage facilities as anything else (MCR/a-4, 10). When asked if she was considered a specialist by other teachers, the French teacher answered in a deprecating way - "Well, I don't know how special I am, but... I give [the generalists] their spare, let's put it that way." (MCR/b-20)

Some schools had *ad hoc* committees to raise resources. Sitting on these were teachers who had been volunteered - in other words, they either went to the meeting and were given the post through acclamation or were informally told that it was their turn (MPU/b-34, ECU/f-23, ECR/a-14, ECR/a-18, ECR/b-31, EPR/c-22, JOPR/f-24). These groups were short lived however, terminating once the resources were procured. For many of the teachers interviewed, information, advice, resources or good hints could only be found through the teachers' own initiative and scrounging abilities - through informal chats and "stealing ideas" (ECR/d-21, 23, MPU/a-23, EPU/b-24, EPU/c-14, 20, EPU/d-5, 17).

A few of the younger teacher complained about their school's informal system. One teacher said that it made her feel like she was bothering her colleagues, and wanted a person formally designated to handle curriculum problems, like a departmental head (ECU/b-39). Another said that he was wasting a lot of time re-inventing the wheel which he knew already existed, if a mentor would just explain it to him (ECR/c-12). He hoped that the school might go that way in the future, where teachers would once again be specialists in science and art (ECR/c-

21). The last person said he had taught in Britain where even elementary schools had departments and he thought it made the system run a bit smoother:

> for every subject there is a teacher on staff - that's their area of expertise and they are responsible for learning and keeping abreast of the latest developments in the curriculum in their subject area. When I was in England I was working with English. Other teachers would come to me and ask questions for English and for phys ed. So, I certainly see the benefits to that, and I think it is something that I would like to see us move more towards, in a more formal manner. There is simply so much curriculum and it is so very specific, that it's difficult, if not impossible, for each individual to know absolutely everything about every subject that they are teaching. So why not have, in each division, or certainly at each school, have a teacher or two, that you can go to that can help you, with science or geography or history or whatever. It only makes sense to me. Every school has those - teachers that have more strength in history or more in science. In England, they are advertised. You want a teacher for science, in elementary school, and I think that there are certainly advantages to that from what I've seen. (ECU/d-17)

As mentioned in the Context section, school 6 ("Program Leaders") was the only site with a fairly formalized approach to curriculum development and resource supply. Six teachers were designated "curriculum leaders", each given a specific subject area. They were given the responsibility of being liaison to the board and teachers, and to ensure that the curriculum was being taught (MCU/a-9). The principal explained the process:

> [The Department] is basically a secondary level concept. However, if you substitute that word to curriculum leader, you would have curriculum leader meetings. That approach definitely happens here. In addition, we also have resource team meetings every Wednesday morning, where resource teachers come together. Those resource teachers function as teachers who help other teachers or aid other teachers and certain students with their class. So, you also have that type of meeting going on also. (MCU/a-17)

However, even with this systematized approach, the leaders themselves professed the informality of the arrangement. As "leaders of servitude" (MCU/c-2), all the teachers interviewed said that their job was merely to provide help and advice when needed, not to have any summative role (MCU/b-21, MCU/c-25, 26, MCU/d-12, 33). Beyond the periodic information sessions, the teachers said that the staff acted fairly autonomously. The Science leader spells out her job:

> I basically look after the science materials, I look after the program - if the science teachers have a question, if they need something, they come to me. We have science meetings, monthly - hopefully, not always. Sometimes more than monthly, sometimes less than monthly so. (MCU/e-31)

The French leader stated that she would talk with other leaders about where their areas touched. In that way, she says she is the most involved teacher in the integration process:

> Yes, I have to - because in this school we have *science* (en francais). So, I have to work with the science curriculum leader. We have *religion* (en francais), so I work with the religion curriculum leader. Even though we are teaching *religion*, it has to be the same as the English program. So, I work with Teacher 15C to establish some consistency. I feel that makes the teachers feel more a part of the school, and not just like a French teacher. (MCU/d-34)

The principal of school 7 ("Retrospective") sadly stated that the school used to have a similar structure of program leaders but that it had been cancelled at the elementary level because of budget cuts. Now, she said the teachers had to rely on informal leaders to provide resources. She added that she gave free periods to people within the same division in the hopes that they would help each other at that time (JOPR/a-17). Recently, the only formal positions had been created were for a computer resource person (JOPR/f-15).

Fusion

Most of the rotary schools, as would be expected, had little to say about fusion. The configuration of classes did not allow it. Principals of schools 3, 6 and 8 all mentioned that they had tried the various fusion experiments of the Common Curriculum (namely Social Studies and the Arts). However, with the new guidelines they had quickly returned to the disciplinary arrangement. This change was looked on as quite beneficial by some and with regret by others:

> One of the ironies that we're finding is, the Ministry seems to encourage integration but the report card is not in an integrated form. Where once upon a time you would be able to call history and geography social studies, on the report cards it now indicates history and geography as separate entities. It also does the same thing with art, drama and music. So, that's one of the dilemmas we're facing right now - certainly a challenge. (MCU/a-12)

> I don't know how effective the fused history geography really was. I have a real problem with somebody having a history bent and some more time was spent on history and less on geography. (JOPR/a-28)

Some of the teachers had actually tried fusing subjects in the past and complained highly about it. One said that she had been forced by the Common Curriculum to fuse the arts together and had created a mediocre mishmash, and would never do that again (MPU/b-28). Another felt that she preferred separate courses in History and Geography to allow more structure and focus (MCU/d-27). In opposition, others had taught social studies previously and thought the two should just be taught naturally together (MPU/d-19, MCU/b-2, 20, JOPR/e-20). However, guidelines and prep-time limitations prevented this (JOPR/e-21, 22). JOPR/c - the one teacher interviewed in the rotary system who was actually in a position to fuse two classes - still did not do it. His explanation was quite pragmatic. He said that he had a science class and a math class of same students, and could in theory collapse them into one. However, he had other science classes – therefore why take the extra time to make a whole new course outline? He added:

> Then I get into the other students saying "well, how come we don't do neat things like this - and then all the math stuff - well we still have to do math." I guess, for my own sanity I just say – that's enough. (JOPR/c-18)

Strangely enough, the homeroom schools, although in a perfect position to fuse entire days of subjects also adamantly refused to do so. When asked why, the administrators gave imminently understandable answers. The Vice-Principal of school 1 ("Charitable") said that the teachers seemed comfortable with the traditional disciplines and that they simply didn't have a complete set of textbooks for each teacher to monopolize for the whole year (MCR/a-6). One teacher received the history texts for six months and then exchanged with another teacher for geography books. The Principals of schools 4 ("Lone Scholar") and 5 ("Gemini") put the responsibility squarely on the back of the new guidelines (ECR/a-9, EPR/a-14), while Principal ECU/a (of the "Forces Base" school) gave a more idiosyncratic answer. He said that he liked the

disciplinary model – it allowed teachers and administrators to see exactly where the student was failing in the curriculum (ECU/a-9).

For many teachers, fusion just did not figure into their paradigm. They accompanied their denials with a number of good excuses why this was not a great way to integrate. They discussed problems of clarity (MCR/d-16), said they were following the Ministry directives (EPR/b-13, EPR/c-15, ECR/c-15, ECR/d-17, ECU/d-10), preparing the students for high school (ECR/e-16) or merely following the way things were supposed to be done (ECU/c-13). Some teachers even said that they realized the flexibility the homeroom system afforded them for fusion and said they might try it in the future (MCR/d-11, MCR/f-18). Of the entire group only two teachers said that they were presently fusing parts of the curriculum. However, when further questioned, they still admitted to keeping the subjects separate. The first said that she had an integrated Arts class in that she didn't tell the students until they got to class whether they were going to do Art, drama or Music that day (ECU/c-11). The second explained that due to block scheduling he could expand a history into 2 periods and make up the difference later (ECU/f-2).

The one exception in this study was School 8 ("Inner-city Innovators"), which dedicated itself to fused Integrated Studies programs (History-Geography-English and Science-Mathematics-Design & Technology). Explained in great detail in the Context section, all the teachers said that to do this took a leap of logic from what teachers are used to. It was not linear, not structured in the traditional sense, and in fact defied the disciplinary system. The principal voiced her enthusiasm of the approach:

> I think if you go into the classrooms there are times when the kids aren't sure whether they're doing science or math - and they're probably doing both. Other subjects that are integrated are English, History and Geography and that's just a wonderful way of integrating. It's a particularly good way of teaching English because all of it is done through the History, through the Geography. So, the English lives through those programs, and vice versa, and the teachers work very closely together. (EPU/a-1)

This format was actually accomplished with great aplomb by teachers EPU/c and EPU/f (the founder of the program), who used it in conjunction with thematic units (EPU/f-1, 3, 4, 12). He would be the first to say that he was endeavouring to erase the disciplines – "life's not like that" (EPU/f-28). However, both agreed that it was a rather radical form of integration and subject to problems at the beginning. Teacher EPU/c said that she integrated all 3 subjects together, but that a few teachers at the school just couldn't and had to revert back to the clarity of subject separation (EPU/c-16). She did admit that it was difficult at times to bring in all expectations to the stream of the program. Sometimes she felt it was difficult to work geography in and had to simply stick in things that didn't relate (EPU/c-17, 21).

The French teachers had a much more difficult time trying to fuse French-History-Geography into one mass. Rather, they would quite often revert back to more of a crossdisciplinary approach - teaching History in French the first term, Geography in French the second (EPU/b-17 to 20, EPU/d-1, 3, 4, 12, 13).

> -this is because of their level of French history. It's very hard for them because there's a lot of language involved. In geography, I can use more terms that they can just translate, and it's easier. Many of the terms are the same in French and English for geography. (EPU/d-13)

However, both agreed that while it took a bit more planning to do the subjects in conjunction, they would never return to "just French" (EPU/d-5). Instead, they would just take the occasional "pause" to reinforce some grammar rules, based on what's written in the textbooks (EPU/b-22). Interestingly enough, even the ESL teacher, who formally did not have to include any other subjects into her course, seemed to informally copy the Integrated Studies approach and fused World History into her class for interest sake. She said that it has made a great difference in student interest and motivation (EPU/e-2, 3).

The Thematic Approach

The thematic approach was perhaps the most ubiquitous and immediately recognizable of the integration methods. However, it was also the one with the widest interpretation, ranging from small class-based projects to much larger school-wide undertakings.

Teacher-Based Themes

Quite a number of teachers said that they included some thematic projects in their class - they usually took up one or two periods and were based on the teacher's own initiative and design. In most cases, the themes reflected a balance of Ministry expectations and the mood of the class. One teacher said that her students were sports-minded so she did a theme on "The technology of hockey" (ECU/b-14). Another did one on "countries" that brought in Music, drama and art of various countries (ECU/c-10). Teacher ECU/f said that he only did themes on a regular basis in religion (usually around some moral issue) - because it was more loosely set up than the other guidelines (ECU/f-18). He discussed how he had the student turn the Ten Commandments into a board game.

> So, we also have thinking skills and a writing project, because we had to write out the rules. This crossed three areas. We did it for 120 minutes. They had to devise this board game so that they could teach my reading buddy class, the grade 2 class, about the Ten Commandments. It was pretty cool. They do some really fantastic work. It's amazing what they've been able to do. You should see it - like monopoly board games out of the Ten commandments ... trivial pursuit ... it's pretty funny. (ECU/f-14)

Teacher MCR/f combined information and skills from English, Math and Geography to create a project on Volcanoes. He said that this allowed him to combine marking into one concrete assignment (MCR/f-1, 4, 14, 22). However, all agreed that this would be used as an end-of-unit project and not something that would be common. It was too demanding on time, the guidelines were now too straightforward, and overuse would make the approach mundane (MCR/f-19, MCR/h-16, MCU/e-28, ECR/e-19). Teacher ECU/c said that she really didn't have the

experience to handle this radical and difficult method - she confessed, "right now I stick mostly to traditional approaches" (ECU/c-17).

Some teachers made this a more endemic approach (ECR/d-20). An Immersion Teacher, MCR/g, for example, was a great "project" enthusiast and had her students continually making something - quilts for charity (MCR/a-8), artwork for a theme on legends or hats for math class (MCR/g-1). She said that it was just her way of teaching (MCR/g-14, 20, MCR/f-15). Another French teacher, MCU/d said that she used themes continually in her taught class just as a vehicle to develop their speaking, writing, and listening abilities in the language. She felt that this method was best at this age (MCU/d-1) and would think up themes such as "dreams" (MCU/d-3) or "carnival" (MCU/d-24). Activities would go around these and students would have to work in team activities (MCU/d-25). She said that although this approach was no longer promoted by the Ministry, it was her way and she would continue on her own instincts (MCU/d-37, 39, 45). These sentiments were echoed by Teacher JOPR/b (another French specialist) (JOPR/b-1, 29, 30), who said that she could make a theme last over two months, depending on interest of student and the right school environment (JOPR/b-31). Finally, two teachers said that they had thought up a theme on their own and had come back to it again and again throughout the term. With Teacher ECR/c, it was sports (ECR/c-18), while teacher MPU/c dwelt on "conflict". She had the students watch a video in English on WWI, write reflections, do an activity in History, and winding up with conflict management in guidance (MPU/c-1, 2, 28, 29, 48).

The Thematic Unit

Two schools in the study had experimented with the use of formal Thematic Units (created initially by the Common Curriculum), and had experienced totally different outcomes. At school 5 ("Gemini"), a transformation had taken place in the last few years and what used to be a flowing fountain of thematic units has become a mere trickle. Teacher EPR/b and EPR/c said that they would spend a lot of time planning out units they thought the students would enjoy

and then working in the Common Curriculum outcomes (EPR/b-17). Themes would include ancient Greece, Victorian Times, Mysterious Phenomena (EPR/b-1, 2, 6). Whole days would be taken up with theme-based projects around these units (EPR/c-15). However, as the curriculum became more rigid and grade specific, and as the teachers got less release time for planning, they switched back to more conservative, less time-consuming teaching methods (EPR/c-19, 24). Now, they mention that they still do a few, period-length themes in isolation, but difficult with "tunnelled courses" (EPR/c-12, 20, 42). The principal was sympathetic to both sides. She saw how themes could motivate teachers and students - but she also saw the pitfalls of the approach:

> I came from the Formative Years part where I had seen the problems of theme planning. Where teachers took a theme and they just... the theme was the most important thing and it didn't matter what the kids learned about the theme. It was just a whole bunch of stuff. We tried hard to shift the focus - maybe the theme was great and dandy but let's see what outcomes or expectations that you wanted to could cover and those were the important things. And so coming from the consultant role, we had to try to get teachers to weed out and to focus more. That's what we did here for the last few years - to start seeing if we could shift the focus a little bit (EPR/a-22).

The other school, 8, had an opposite reaction to the method - it seemed to have perfected the integrated thematic unit and had become a model test case for the approach (this is discussed also on pp. 306-8). Within each fused course, the teacher developed a number of units that make up the entire year. The principal referred to the variety that was being offered – a stock market unit (Math), shopping mall unit, a pioneer school house unit, a trial of Louis Riel unit (EPU/a-1, 2). The two who taught English-History-Geography used thematic units almost exclusively (except for the first few weeks or so to get the students accustomed to the new educational setting). A routine was followed - each theme had a novel, a video, a number of small activities and a concluding event (EPU/c-6, 17, 18, 21, 22). For clarity, the unit was layed out in a table of contents that the students would then fill up with work assignments (EPU/f-1, 4, 17). Some teachers found great difficulty in doing these units based on the new, disciplinary resources that were being offered, and did thematic units interspersed with more traditional forms of teaching.

This was seen especially with the French teachers (EPU/b-3, 15, EPU/d-1). As one teacher explains:

> No, not most of the time. But they do have a lot. When there is a unit to do, there'll always be a project. At times, if there is none there will be one - they have to read novels. So there will be a project on that novel. There's not necessarily a project. (EPU/d-14)

The difference in success between the two schools may be related back to Dimension C (inspiration). The teachers at school 5 ("Gemini") seemed to view the innovation as something forced upon them from above, and did not feel totally comfortable with the method. The teachers at school 8 ("Inner-city Innovators"), however, always viewed the thematic units as something they discovered, perfected and promoted.

School-Wide Themes

A number of sites seemed to have school-wide projects. They were discussed by the teacher as being of varying success. Teachers at schools 1, 4 and 5 made mention of a science fair that occurred every year. As seen earlier, however, as the new Ministry guidelines made little room for the project, it had just seemed to fade off into the distance (MCR/a-8, MCR/c-3, ECR/b-2, 27, EPR/a-16). As with the thematic units, the more successful themes were those that were "home grown". In these instances, certain key people were responsible for seeing that they were enacted to any great extent: In school 1, it was teacher MCR/b's charitable drive (MCR/b-1); in School 2 ("Forces Base"), a number of teachers got together and created a career day (ECU/f-6); at school 4 ("Lone Scholar"), a jointly chosen Christian theme was promoted by all teachers at certain events throughout the year (ECR/a-2, ECR/b-25, 26, ECR/d-7); at school 6 ("Program Leaders"), one teacher had organized an "International Day" event (MCU/b-1, 21).

Perhaps the greatest example of a school-wide thematic project was found at school 7 ("Retrospective"). When each teacher was asked about the most prevalent form of integration at the school, s/he immediately sprung on "The Seaway project" (discussed in detail in the context

section). However, to a large extent, this was viewed as a special one-week project that was only held at arm's length to the rest of the curriculum (JOPR/a-23, 24, JOPR/b-35, JOPR/d-16, 18, JOPR/e-18, JOPR/f-24, 16F-5, 6, 19, 20, 24). Teacher JOPR/c sums up the approach at the school:

> We do a three-week session of it, and that's the extent of our thematic approach. It's because the board has asked that we do thematic units at some point along the line - well that's our attempt - and it's on the Seaway Villages - the lost villages and seaway. It's an interesting unit that we're going to do, and we get to do a lot of things related to that theme. It could probably occur for a longer period than three weeks. That's the course they've chosen the last four years to do it here - so that's it. [so, a top down approach?] Yeah, but that's the way it goes - it occurs but just not on a full-time basis. (JOPR/c-15)

Grumbles against the Thematic Approach

A number of participants found some intrinsic fault with the approach. Some thought it more suitable for small children (MCR/c-11, 31) or that teachers could get caught up in the project and lose pieces of the prescribed curriculum (MCR/d-6, 8, EPR/a). The Principal of School 3 ("Open Option") said that it was a tricky approach for higher level teachers:

> This comes directly out of the junior schools. Primary and Junior schools would, I hope, have a great deal of thematic approach. Our grade 6s are no different. As they get into 7 and 8, the thematic approach begins to dwindle somewhat and it goes more into the harmonization issues we were talking about before. (MPU/a-20)

Two teachers criticized the approach harshly as being too vague and open to sloppy teaching. One linked the approach to group work and the child-centred approach (JOPR/e-11 to 13, 19) and feared for the students' grades as they progressed to high school. The other, Teacher MPU/b, complained bitterly that under the Common Curriculum she had been charged with creating thematic units around a fused Arts program (discussed earlier on p. 297). After squeezing all outcomes (even ones that were unrelated) into what she thought of as "artificial" themes, she said the end result was a mediocre blob (MPU/b-1). She was even more disturbed to discover that in

this method mediocrity seemed to be generally expected (MPU/b-4, 37). She said that she would no longer do themes - only if the kids begged her (MPU/b-17).

One teacher had a twist on the approach, thinking of themes as constraining as much as liberating: "I try to keep it rather loose. When it comes to thematics I don't like to be corralled by staying within a specific theme - especially in Language Arts or something" (ECU/f-18).

Transdisciplinary

This was the one approach that teachers seemed to uniformly agree on – they did not go anywhere near it. Their negativity had wide scope, however. It ranged from simply no comment at all to a firm "Not bloody likely!" Many teachers gave excuses why this would not work:

> No - that would be hell on earth if I ever did that. Especially with kids nowadays. Our Grade 8 classes have 30 kids. I just can't imagine stepping into a class that size and doing that. ... God knows what the kids might be doing. Somebody could get hurt. No accountability. It's not for me. (MCR/b-21)
>
> No, we'd never get the curriculum covered. ... It is our responsibility to make sure that the curriculum contents are passed on. What happens when kids go off into High School and they don't know scientific methods or at least not know how to implement it? (MCR/c-15)
>
> Sounds like Hall-Dennis. I came from that era, thank you very much. I don't want to go back. I remember walking into class and them saying "well, whatever you want to do today just do it. There are math sheets over there, there are comics over there." It was a total waste, because I'm afraid kids just aren't motivated at that grade level to do that. I'm really glad they threw that out. It was a disaster. That was the year they said "oh yes, you also don't need to learn your multiplication tables." Because of that period we have a whole group of students who don't know them to this day. (MCR/g-19)
>
> No, I'm too old school for that (MCU/e-32)
>
> You can't be that flighty. Well, I guess that was maybe in the sixties or something. ... Yeah, the Hall Dennis era [chuckles]. (ECR/b-32)
>
> That would leave yourself open. (EPR/b-22)
>
> They are not going to come in and say " Gee Miss, I really want to talk about those United Empire Loyalists today." They are not going to say that. (EPR/c-23)
>
> You'd better be good at it" (EPU/b-25)

While the remainder of the respondents also denied the uses of the approach in any pure form, they thought it quite acceptable to give students a certain amount of "controlled freedom" - choice within tight boundaries (MCR/h-24, MPU/c-32, ECR/c-22, ECR/e-22, MCU/c-27, MCU/d-36, ECU/c-21). Two teachers explained the reasoning behind their restraint:

> it's good to give your kids input, but you can't give kids too much input. They really don't want it. Yes, give them choice and opportunities to express themselves but at that age... There is nothing wrong with having choice but having free rein sometimes is not the best. When you have all the power to make the decisions, sometimes that's the worst to have. It's so open ended you don't know what to do. (MCR/d-23)

> I think the way I can see that working, is that if you set up a perimeter and you set up a structure, then you allowed the student a choice within that. I think, actually, most students prefer that. I think, if there was absolute free choice, I can't see much agreement among the students - other than maybe a longer lunch hour. So I certainly do agree with empowerment of the student, but I think at the same time, we are responsible for delivering the curriculum. There has to be some limits. (ECU/d-19)

Some teachers gave the students an increased amount of freedom during research projects (ECU/b-22), special events, (JOPR/f-27), lab experiments (JOPR/c-21), or if the students had undergone a lengthy period of training.

> Oh, yes. I will do some, but I won't do it after a certain period of time where they can control their own learning. I have to show them how to do that. So I do that from September on. You really work your ass off to try and get to do that. By January-February - now's the time that you can see whether it's worked - if you've been effective or not. When they'll slowly start taking over, and I give them a bit of control. (MPU/b-36)

A few teachers appeared torn in that they wanted to give more freedom to the students but felt they needed to know some things and they weren't going to do it naturally (JOPR/b-39, ECU/f-24). The participant who seemed to give the most leeway to her students was the Immersion Teacher JOPR/d, who said she just wants the students to keep talking - if they go off course into daily events or whatever, that's okay (JOPR/d-11, 19).

At school 8 ("Inner-city Innovators"), the teachers were well aware that the fusion-thematic approach was open to increased student freedom. They had found, however, that the

constant problem-solving process appeared to keep students focused on the task at hand. Like the other schools, the teachers appeared to offer the students a number of rigidly formatted choice of activities rather than any real freedom. The environment kept the control (EPU/d-18, EPU/e-22, EPU/f-16, 20).

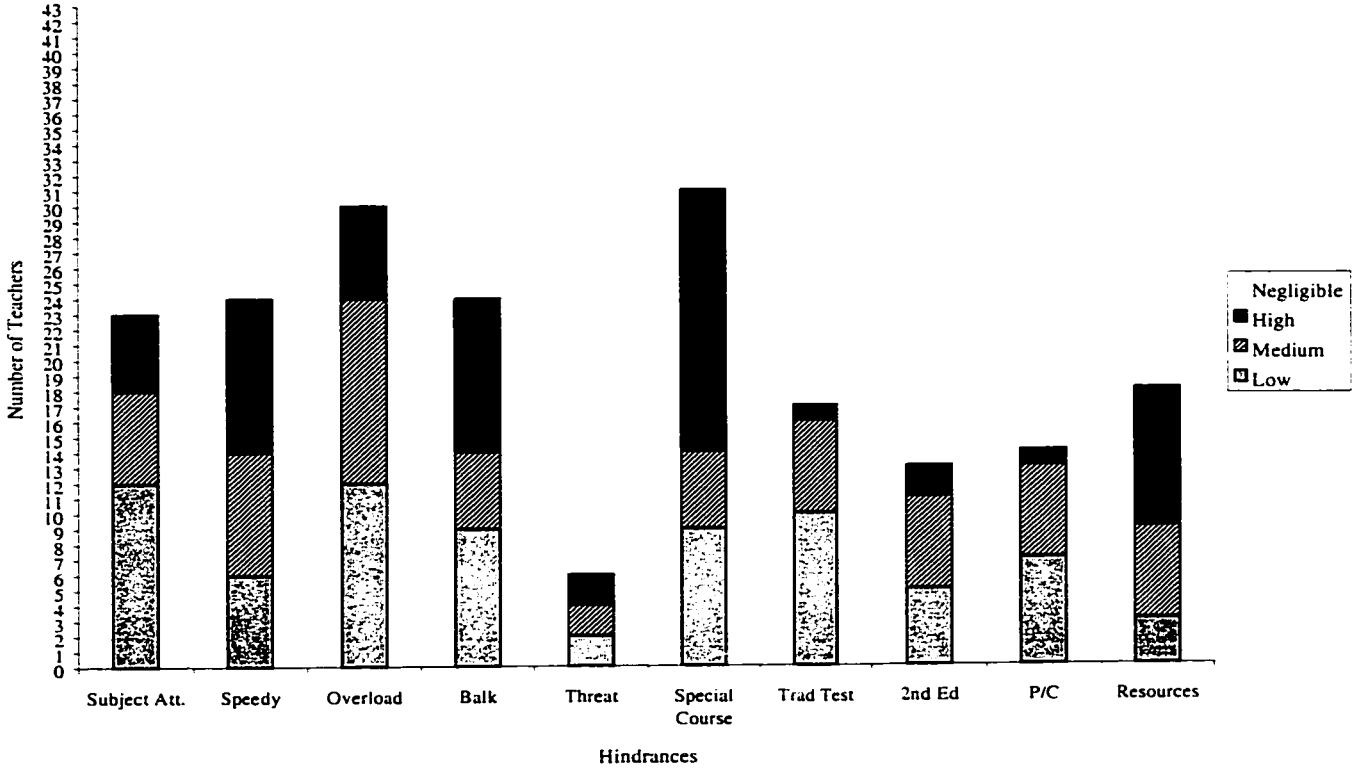
Overall

While participants employed a wide variety of forms of integration at different times, it became quite clear that most did not use them regularly. Rather, they viewed these methods as supplemental to the disciplinary structure of the timetable. As a consequence, these forms were applied in a rather *ad hoc* fashion. The Thematic and Fused approaches demanded a more thorough transformation of the teachers' mindset and a greater commitment on their part. As such, changes had to be made to the actual structure of the class timetable to accommodate their presence. As seen in school 5 ("Gemini"), however, when traditional structures return the school population usually rejects these forms.

Dimensions F and G - Hindrances and Aids to Curriculum Integration

On the whole, most participants who were interviewed made only mild comment on being hindered in their attempts to integrate the curriculum (as shown below in Figure 11.8). Of most importance was their critique of the way in which the new guidelines had been distributed to teachers. Here, they commented on the way the Ministry had undertaken the task (see especially Speedy Implementation, and Lack of Resources), and the limitations of the documents themselves (see sections on Work Overload, Balkanization, and Specialize Course Structure).

Figure 11.8 - Hindrances to the Implementation of an Integrated Curriculum (Teachers' Perception)

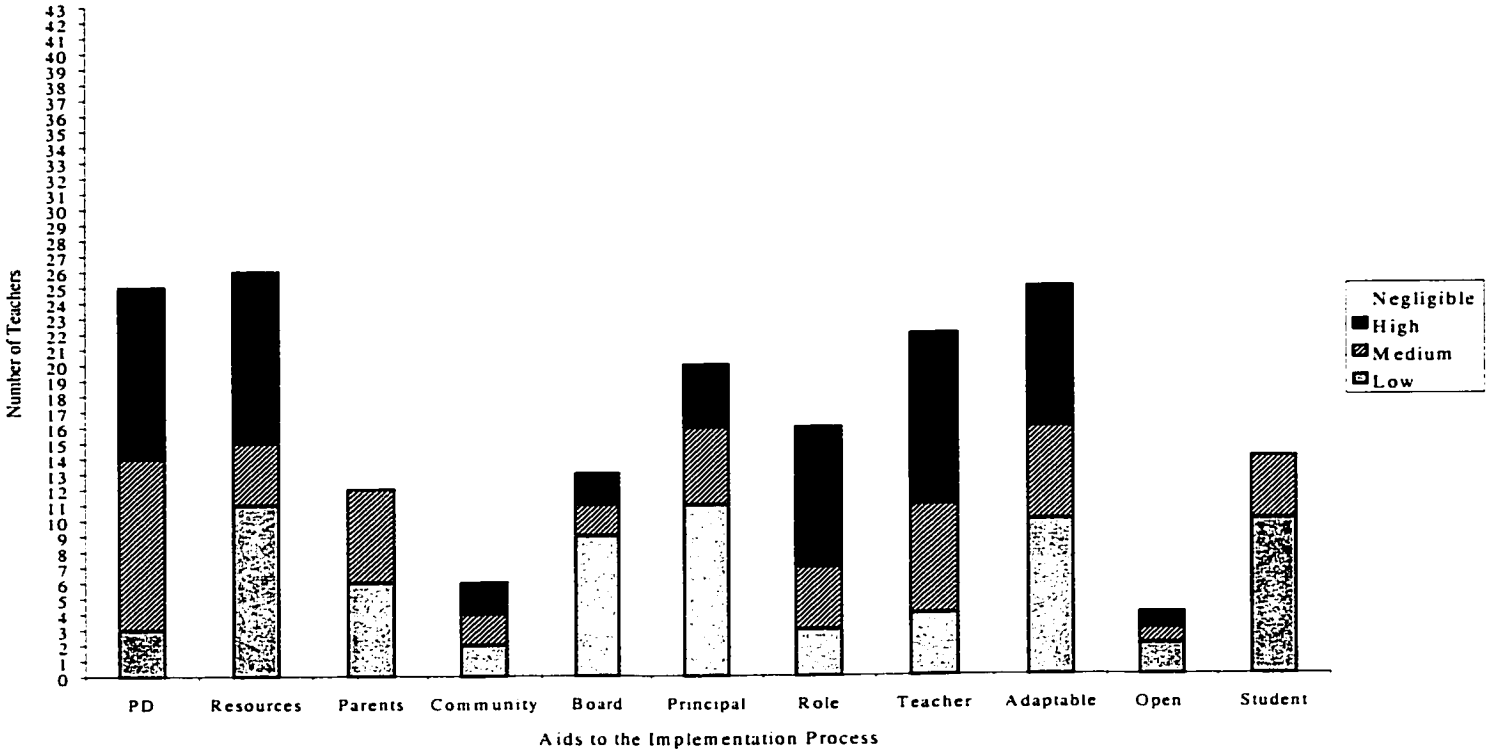


*Note – levels of importance shown above are based on ratings shown in Appendix D, and in the "Participants' Codified Response List" shown in Appendix H.

To ameliorate the problems they saw, participants took a fairly straightforward approach. To solve the present difficulties of the Ministry guideline, many proposed a combination of

professional development and additional resources that explained the documents (see figure 11.9 and relevant sections below). A number of teachers believed that the "grassroots" were a better place to look for assistance. They maintained that the guidelines should be more adaptable to their present situation, and that their colleagues (or other very local sources of aid) would be the most likely source of help in implementing and maintaining an integrated curriculum.

Figure 11.9 - Aids to the Implementation of Curriculum Integration (Teachers' Perceptions)



*Note – levels of importance shown above are based on ratings shown in Appendix D and in the "Participants' Codified Response List" shown in Appendix H.

Subject Attachment

Homeroom Teachers

Almost every teacher interviewed in this setting seemed to be fearless in regards to new subject areas. They insisted that the elementary teacher should be considered first and foremost a

"generalist" in outlook and should never be tied to one sole discipline (MCR/b-25, MCR/f-23, MCR/g-22, MCR/h-2, ECU/c-24, ECR/a-4, ECR/b-1, 37, ECR/d-26, EPR/b-27, 28, EPR/c-26). As one teacher put it – "I'm a generalist who is a specialist in all my generalities" (EPR/c-34). Some admitted to being nervous when they were originally given the subject load but chalked it up to "opening night jitters" that they sloughed off in a matter of weeks (MCR/c-20, MCR/h-30, 31, ECU/a-18, ECU/b-30, ECU/e-12, ECR/c-24). If they had been at all disciplinary in outlook, many supposed, they would have been quickly replaced. Besides, being tied to one subject was considered "old-fashioned" by most of the younger participants (MCR/e-24, MCR/g-40, MCR/h-1, 32, EPR/a-23). Even the teachers who confessed that they were naturally weak in certain areas (such as art, history or religion) explained that they compensated for this defect through advice from stronger members of the staff and prepackaged activities (MCR/a-13, MCR/d-25, 26, MCR/e-4, 23, MCR/h-10, ECR/a-19, 20, ECR/e-6, 25).

Rotary Teachers

Teachers in this environment appeared a little more set in their subject areas - the system of course promoted that phenomenon. Schools 3 and 7 had particular problems in this area. The Principal of School 3 ("Open Option") said that he found that a number of teachers at his school had originally come from specialist situations and felt that the generalist position was a bit of a demotion (MPU/a-34). He said that because of this mindset, and the way the schedule had been created, breaks were created among subject areas (MPU/a-9). As an example, he said that some teachers had great trouble doing themes simply because they couldn't visualize it (MPU/a-27). The staff supported his theory. Teacher MPU/b was quite forthright about her great passion for the Visual Arts. Although she denied that this would be to the detriment of other subjects she taught (MPU/b-46), she definitely felt that if she included any other subject areas into it, the class would become "watered down" and mediocre (MPU/b-4, 5, 20, 21). The other two teachers were also quite vehement that there was a time and place for each particular subject, and that while

they may make forays into other areas, they would not let that get in the way of the mandated, disciplinary material (MPU/c-5, 12, MPU/d-8). Although both said they weren't as rigid as High School teachers, they felt comfortable with the structured atmosphere (MPU/c-39, 40, 42). Teacher MPU/d also added that she would be fearful to teach kids something that she had not been specifically trained in (MPU/d-22). The participants at school 7 ("Retrospective") painted a similar scenario, where the traditionally, subject-attached approach seemed to be just *de rigeur* (JOPR/a-27, JOPR/b-31, 42, JOPR/c-23).

The remaining two schools seemed to have more breathing space. All the participants in school 6 ("Program Leaders") proudly stated that they felt competent as "generalist" teachers (MCU/a-21, 22, MCU/d-40, MCU/b-26, MCU/e-34) while all participants at school 8 ("Inner-city Innovators") simply had no comment to make.

The Speed of Guideline Implementation

The amount of pressure the participants felt in implementing the new curriculum really seemed to depend on the atmosphere of the school. Some sites took a rather "laid back" attitude. Schools 3, 6 and 8 had only an occasional word about "time pressure" but little more (MCU/a-19, MCU/d-44, EPU/c-19). This might have been due to the influence of the more seasoned veterans, who had quite a calming effect of the younger teachers. Teacher MPU/b said she had felt under the gun when she was implementing the Common Curriculum (MPU/b-5, 50). Now that she was older, she had taken a more "let me just teach, will ya?" stance (MPU/b-51). The other participants seemed to feel much the same way (MPU/a-32, 33, MPU/c-46, MPU/d-30). A few participants at school 7 ("Retrospective") complained a little more vehemently about the lack of prep time in general, but had no specific comments about the present curriculum (JOPR/b-31, 47, JOPR/e-21, 22).

Some schools showed more concern about the way that the curriculum had been implemented. At school 1 ("Charitable"), the Vice-principal said that the process was a bad combination - it had been distributed too close to the beginning of the school year (MCR/a-16) to a class of workers (teachers) who were self-proclaimed perfectionists (MCR/a-20). Many of the teachers shared this view, but freely admitted that the events were merely the occupational hazard of the business. All seemed to take it with good grace and said they would just have to cancel any innovative thinking for this year. They looked forward to the summer to retool and get back to business as usual (MCR/b-30, MCR/d-28, MCR/e, MCR/g-27, 29, 30, MCR/h-18, 20, 21, 36). This attitude also prevailed among the teachers at school 4 ("Lone Scholar" – ECR/b-41, ECR/e-29, 30). However, the principal, who had just arrived that Fall, showed considerable anxiety about the speed of implementation and mentioned it frequently throughout the interview (ECR/a-1, 2, 13, 24, 25).

The last two schools (2 and 5) showed apparent distress about the way the new curriculum had been distributed. Each participant said that s/he was struggling to get through the year and that this had put a considerable crimp in any innovative thinking. Looking back to the Common Curriculum as halcyon days, the teachers at school 5 ("Gemini") sighed that integration was simply now a luxury that they could not afford (EPR/a-28, EPR/b- 3, 20, 33, 34, EPR/c-27, 30, 32):

> I am treading water this year. There are too many things thrown at me and I am trying to cover as many expectations as I can, as quickly as I can, but I don't have the time to plan. Had I been given them all in early summer, maybe... (EPR/b-19)

When asked the timeframe of expected implementation, the teachers at school 2 ("Forces Base") all seemed to indicate that the documents had been handed them in the late summer and that the Ministry expected immediate adoption. While they hoped that they would eventually come to terms with the guidelines, they thought it would take some time (ECU/b-20, 33, ECU/d-16, 23,

ECU/e-15, ECU/f-12, 27). Teacher ECU/f was quite blunt about the combination of the new curriculum, the speedy implementation and integration:

> I'm working my butt off trying to figure out a way to bring these together. Come back in five years and talk to me about this curriculum - if it's still around. (ECU/f-22)

Work Overload

A relatively small number of participants (7 or 16.3%) felt overwhelmed by the amount of material they had received from the Ministry, regardless of the amount of time they had been given to assimilate it into their classrooms (MCR/a-16, MCR/d-31, ECR/a-1, JOPR/a-27, JOPR/b-2, EPU/e-22). One teacher felt so passionate about this subject that she exclaimed:

> It has caused a huge work overload, and the way they have implemented it, it's really not worth it. ... I don't think the workload any of us are under right now is worth it. There are a lot of very, very good teachers thinking of leaving education. ... it's a combination all of the work load - curriculum being up there as one of the heavier things on your plate. But that huge workload and not enough hours in a day, and the cut-backs and everything else. There are too many good people leaving education for something less stressful. With what we're doing right now – it's got to give somehow somewhere because you're going to lose too many valuable people (EPR/c-37).

6 others (14%) took a more hopeful stance, saying that the curriculum was a bit of an overload at the moment, but eventually (a year perhaps) all the expectations would fall into logical place and redundancies would be eliminated (ECU/f-12, 27, MPU/a-35, MCU/c-29, 30, MCU/d-41, MCR/h-39). To one teacher, the overload actually increased rather than hindered integration - "I think with the curriculum coming out, I think it is almost becoming necessary - because there are just not enough hours in the teaching day if we are not careful to cover everything we have to cover" (ECU/d-7). An overwhelming number (30 or 69.7%), however, felt that the amount of material in the present curriculum was not a problem.

A number of participants remembered back to the Common Curriculum and felt that it had been an even greater work overload than the present guidelines. They especially recalled the futility of having to make too many connections between outcomes that seemed to go nowhere

(MCR/c-17, 26, ECU/a-19, ECU/c-25, MPU/b-1, 50, 51). The Principal of school 2 ("Forces Base") explained the root of the problem of this form of integration:

> It was very, very demanding. People could not see the reason to do it, and there has to be a reason to do it. If we expect people to work, they have to receive some benefit at the end for doing it. That benefit should be - less work the next unit or something you could use two or three times. None of those benefits seemed to be happening. At least it wasn't apparent (ECU/a-20)

His theory was borne out by the participants who said that they had undertaken to integrate the curriculum or projects on their own initiative. Each said that the work load was exceedingly heavy (brought on by themselves), but that in the end it was worth it – the curriculum had more meaning for the students and time was saved in the long run (MCR/e-32, MCR/f-22, MCR/g-32, 33, ECR/e-32, EPR/a-31, EPR/b-36, 37, MCU/b-33, 34, EPU/d-37).

Threat to Teachers' Careers

Hardly anyone made the barest hint that trouble would ensue for them by engaging in integration activities (in fact, 38 participants or 88.4% made no comment). Even when this issue was mentioned, it was done in vague, almost joking terms. One teacher laughingly hoped the Ministry didn't find out half of what she did (MPU/b-5), while another commented on the paranoia of some of his colleagues (MCR/e-27). Only teacher ECU/f said that he had been reprimanded for doing too many social activities with his students - but he agreed with the principal's gentle scolding (ECU/f-7, 10). A few administrators seemed rather ominous in their promotion of integration. While the principal of school 5 ("Gemini") had threatened disciplinary action against a teacher who kept her timetable too rigid (EPR/a-30), the principal of school 3 ("Open Option") quite bluntly said that he terminated or transferred fifty percent of the teaching staff because they didn't fit the mould of the open school concept (MPU/a-12).

Traditional Testing

A majority of participants (30 or 69.8%) said that this issue did not pertain to them - they were not held by any external testing body and were given the freedom to mark students as they saw fit. The only concrete annoyance that a few teachers associated with this area was the new inflexible, Ministry-issued report cards. Because they had to give a grade for each strand of a particular subject each trimester, they felt constrained to include each one in the class during that time. Rather than building one strand on another, therefore, they felt that they had to include them in rather unrelated chunks (MCR/c-13, MCR/h-36, MPU/b-47, 61, MPU/c-41).

A number of teachers professed that while they thought there was logically nothing to worry about, they had a feeling that one day soon they would be teaching to a standardized exam. And with this would be some curtailing of innovation. For the moment, however, it didn't worry them that much (MCR/e-21, 26, ECU/d-4, ECR/b-39, ECR/d-28, ECR/e-27, EPR/a-25, EPR/c-10, 28). Some teachers even said that they would embrace a more rigid testing process (MCR/d-27, MPU/d-3, JOPR/f-27, EPU/b-19). School 1's ("Charitable") Vice-Principal is perhaps the most forward-thinking of those interviewed in regards to the unexpected impact of the new standardized tests recently put in place. She concluded:

> It's going to effect us next year. Our teachers are just starting to come to understand that a bit. What happens is this - It is the first year for grade 6 testing. This Fall, it's the grade 7 teacher who will give the results to the parents, it's the grade 7 teacher who explains to the parents where their child is situated in the Ministry testing. It is also in grade 7 where the parent will look at the assessment results on their student from the Ministry and look at the report card the teacher has just completed and will compare the two. If the Ministry says my child is at level 3, while you, the teacher, are saying my child is at level 4 - who is right here? What is going on? So, the teachers are going to have to be able to explain this discrepency. So, I don't think the teachers are quite as aware of the impact that this is going to have on them. They probably will not until next year. (MCR/a-16)

The Influence of Secondary Level Expectations

While principals of schools 3 ("Open Option") and ("Lone Scholar") felt that grade 7-8 teachers were under terrible pressure to act "more high school than high school teachers"

(MPU/a-11, ECR/a-6), only a small amount of teachers supported this hypothesis. Some mentioned the curriculum material that the Ministry was dropping down from higher levels, and that they had to find ways to accommodate this new information (ECU/e-10, JOPR/f-20). Other participants said that they were taking the initiative themselves - to prepare their students for High School, some teachers said that they purposely kept the subjects separated into formal classes/labs and made students pay attention to the bells (MPU/d-8, ECR/e-12, 16, MCU/e-37). However, even at the sites with the most contact to the secondary level (schools 1 and 7), participants said that their links were tenuous at best. They simply gave students increasing responsibilities to prepare them for the secondary level (MCR/a-2, MCR/d-11, 12, MCR/f-18, MCR/h-23, JOPR/a-28, JOPR/b-16, JOPR/f-13, 21). The majority of participants (29 participants or 67.41%) gave absolutely no comment about any effects that high school may have on them.

Resources

Lack of Resources

27 participants (62.8.5%) indicated that a lack of resources had no effect on how they handled the curriculum. The remaining teachers simply made the complaint that they found the documents too "bare-bones" and lacking in any resource guides to help them find any cross-disciplinary connections. They felt that they had been left to flounder around looking for resources and wasting time (MCR/f-26, MCR/g-33, MCR/h-20, ECU/b-27, ECR/a-1, ECR/b-1, EPR/a-28, EPR/c-33, MCU/e-21, JOPR/f-28). One teacher made the apt analogy:

> It's just unfortunate that the government just throws it out there and says, "well, there is the new car. There is no owners manual for it, we're not sure how to turn it on, but when you do find it - let us know. If you can write a book for us on how to implement it, send it back to us so we can send it out to somebody. Then, as soon as this car breaks down, well then you're going to have to find out how to fix it." ... You know I think it's just bureaucracy. (MCR/d-20)

At school 1 ("Charitable"), this tightening of resources had an interesting effect on integration practices. The vice-principal said that while the lack of textbooks had inhibited any type of fusion (MCR/a-6), the lack of storage space had created informal resource people and another form of integration - pluridisciplinary (MCR/a-4). School 8 ("Inner-city Innovators") said that they felt the pinch of poor resources most acutely. A lot of the new documents and textbooks simply didn't mesh with the Integrated Studies. They were too compartmentalized (EPU/c-18, 19, EPU/d-2, 21). Even with all the retooling they had to perform, many seemed undeterred from continuing this form of integration (EPU/b-19, EPU/c-29).

Additional Resources

Quite a number of participants (16 or 37.2%) indicated that they were reasonably satisfied with the resources that they had to deal with. Some said that they were stoical, accepting whatever the "powers that be" threw at them (MCR/f-30, ECU/b-27, 38). Others took a more "home-grown" approach and got by through sharing and making use of resources in the school community (MPU/a-11, MPU/b-45, MPU/c-49, ECR/d-33 to 35, JOPR/a-18). A small number of teachers actually specified certain resources that they thought would make their courses blend together easier. However, they looked on this more as a wish-list than anything else. This included better lab equipment (ECU/d-22), prepackaged workbooks (JOPR/f-29, 30) and additional resource teachers (EPU/e-23). In line with the previous section, a large number of requests were made for resource guides that contained ways of connecting the expectations across the subjects or in creating activities that would span the disciplines (MCR/e-38, MCR/h-43, ECU/a-22, ECR/a-16, 18, 29, ECR/b-44, ECR/c-32, ECR/e-5, 6, EPR/a-17, MCU/c-31, MCU/d-48, JOPR/d-21, EPU/d-20).

A small number of teachers had felt that the distribution of text-books by the Ministry and schoolboards had been faulty. One teacher said that many of the resource books he had picked from the Ministry lists were merely a waste of money (JOPR/c-29). Another said that because

many of the books were simply out of the school's price range, she was forced to either buy the more substandard printings or keep her out-of-date texts (EPR/c-43, 44). One teacher, full of ire, candidly expressed her views about the cryptic process of getting textbooks:

> There is no link between what the Ministry's telling you what to do and the resources they are giving you, or allow you to have. .... Not even the teacher's manuals are provided for! I wrote for a second language manual a few years ago, and I know that in the manual, if you don't have the teacher's manual, you don't know what's going on. But now the Ministry is not covering for the teacher's manuals. For me, it's all a big joke. Here, we feel that the more we get from the Ministry, the more useless it is. Sorry to tell you that. ... At the end of June, we had two days, we had a list of materials downloaded from the computer and they said we had this much to spend. I just got titles. I saw a title "interaction... " something - but no description of the materials. So, I ordered this and it ended up to be all math material. ... You couldn't see it [beforehand] - not even a description. ... It's lack of coherence and a lot of money is badly spent. (EPU/b-28)

Parents/Community

Complaints from Parents/Community about Integration

A good deal of the participants (18 or 41.9%) (including most of school 2 and all of school 7) either made no comment about their relationship with parents and the community or said that it really didn't effect them one way or another (ECU/b-32, ECR/d-29, ECR/e-28, MCU/a-20, MCU/e-38, JOPR/b-46, JOPR/c-25). Others said that they had only received positive feedback from the parents for their teaching (MCR/b-29, MCR/g-25, 26, ECU/e-13, MPU/c-43, MPU/b-49, ECR/b-40, EPR/c-31, MCU/b-29, MCU/d-44, EPU/c-25). In school 8 ("Inner-city Innovators"), the principal actually said the parents were beneficial to integration:

> People know [about our integrated program] who bring their children to the school. Most of them I meet with personally before they ever come here. So, it's not a surprise - they all know that we do an integrated studies program and how we do it. We have an information night. I meet most of the parents personally. The kids come on a tour of the school. We have a lot of students who come to the school on cross boundary transfers, and they come here because those are the things they like about this school (EPU/a-10).

Some teachers casually mentioned that a few parents were a little hesitant about any new or innovative techniques, afraid that their children wouldn't get "the basics". However, almost all

teachers said that these parents were satisfied once the method was explained to them (MCR/e-28, MCR/f-25, MCR/h-35, MPU/a-31, ECR/c-28). The only participant who felt of two minds was teacher EPR/b who said that when she did themes, parents were divided:

> That depends on the kind of parents. I have had lots of parents who say they love this - love the theme right into ancient Greece, Greek mythology and stuff - they love that. And parents have said to me - how keen I seem on it. You know, like I'm keen on these types of topics too. I have also had parents who said - you need to learn to read, you need to learn to write, and what are you doing this for? Once you explain they are a little bit better equipped - you know. I would think probably, on the whole, I've had more positive than I have had negative feedback from parents. (EPR/b-31)

The principals all agreed that the biggest influence parents had had over the disappearance of curriculum integration was an indirect one. The Ministry, in an effort to put their minds at ease, had made the new curriculum rather disciplinary and conservative (ECU/a-9, ECR/a-6, 23, EPR/a-27). In turn, some principals inferred that teachers would be swayed over to this new curriculum through norm pressure (MCR/a-15, ECU/a-9, EPR/a-4, MPU/a-36).

Parent/Community Support

When asked, 29 participants (67.4%) felt no more parental support was needed and 38 participants (88.4%) simply did not mention community support. It would seem, therefore, that most felt that stakeholders outside the school system were doing enough as it was and that this was not the group to look to for aid. In fact, most of the teachers interviewed only made very mild requests for further parental support. Most just hoped that they would continue to be supportive of school projects in the future (JOPR/f-6, MCU/e-9, MCR/c-32, MPU/b-60). A few wished that there would be a little more active and frequent communication between parent and teacher in regards to curriculum (MCR/a-17, MCR/e-9, 35, MCR/h-43, ECU/b-36, ECU/d-23, MPU/d-32), however they were not displeased with the status quo. Two teachers at school 4 ("Lone Scholar") even indicated that some of the parents had gone beyond the call of duty and had created a parent committee to help them find resources (ECR/b-44, ECR/e-34). Only one

teacher said that she actively recruited mothers to help her in certain hands-on projects like quilting or *papiere mache* work (MCR/g-38, 39). In a lighter vein, teacher MCR/c said she was glad her integration activity, the science fair, was over because parents were too supportive - some fathers had become overzealous and built the project themselves (MCR/c-24).

The concept of "community support" was an even vaguer term for most of the teachers. Usually it entailed the turning out of the public at school events (MCU/a-23) or certain local businessmen coming in as guest speakers (MCR/e-17, MCR/g-39, 40). Teacher MCR/b said her class was the most effected by the community. Her charitable project had spread through the school's chaplain to his parish. In turn, sections of the Catholic community had come to give donations and validate her work through the publicity (MCR/b-6, 7).

Teacher Balkanization and Teacher Support

These two sub-dimensions must be seen as two sides of the same coin. Each site seemed to have had a different outlook, depending on the age of the staff and the informal atmosphere of the school.

School 1 ("Charitable") - Almost every participant attested to the open atmosphere at the school. While it was rare that they had any joint projects or team-teaching (MCR/a-9), they said they planned together and shared advice and support (MCR/a-13, MCR/e-9, 11, 20, 36, MCR/f-9, 10, MCR/h-10). Teacher MCR/e suggested that this open and lively environment was created by the recent turnover of staff and the hiring of quite young teachers (MCR/e-31). Most said that they were satisfied with the amount of teacher interaction at the present time and had no need of any increase. (MCR/b-31, MCR/c-27, 36, MCR/d-30, MCR/h-38, 43).

School 2 ("Forces Base") - Like the previous site, most of the teachers who were interviewed were fairly young. Most said that they met every few weeks to discuss the curriculum

expectations and were, on the whole, satisfied with this arrangement (ECU/a-4, 15, ECU/c-8, 27). While they said that they had not built a teacher support network that may come over years of practice, they felt that this would come naturally over time (ECU/b-9, 29, ECU/c-8). As mentioned earlier, teacher ECU/f pointed out the problems of trying to force team teaching in this setting (ECU/f-10).

School 3 ("Open Option) - While there was no alienation at this site, and the principal tried to encourage the group planning mentality (MPU/a-4, 10, 12, 37), the teachers interviewed appeared to see themselves more as lone scholars than team players. Ensconcing themselves in the more secluded areas of the open school, the older participants said they did not need any more support from colleagues than the occasional chat (MPU/b-35, 52, MPU/d-15, 33). Teacher MPU/b conceded that her aloofness had come from earlier experiences at the school that no longer existed – in the past, she admitted, it had been the site of acrimonious divisions and alienation (MPU/b-54, 55). The younger teacher, MPU/c, felt none of this and blithely stated that she was given tremendous support and encouragement by her peers (MPU/c-37, 45).

School 4 ("Lone Scholar") - While all teachers felt that the small size of the school brought them together informally as a fairly tight knit group, a few acknowledged that more could be done to bring them into closer contact on the issue of curriculum development (ECR/a-18, ECR/b-11, 12, 26, ECR/b-12, ECR/c-31, ECR/e-24, 31). However, this was only a mild concern. Teacher ECR/b, who had taught at the same site for 30 years felt that the school had actually developed a much more collegial atmosphere in recent time - in the past, teachers had been left "to sink or swim on their own" (ECR/b-10).

School 5 ("Gemini") - An extremely small site, the two teachers continued to think of themselves as partners. The only change they requested was that they should be given the opportunity to work together again to plan, generate ideas and support each other (EPR/b-3, 35, 44, EPR/c-36).

School 6 ("Program Leaders") - Only one teacher at this site made a comment on this issue – she felt that her and her colleagues should have a "gentleman's agreement" about how integration should be defined and used at the school (MCU/d-11, 46).

School 7 ("Retrospective") - The principal of this site would be the first to admit that collegial ties were not strong. Informally, she said, there was no alienation and everybody got along. However, very few teachers planned together and even fewer did any crossover work – each one was an island until a school project was mandated (JOPR/a-19). She saw this as her next endeavour (JOPR/a-5). This desire for more team-building was also expressed by other participants (JOPR/c-8, 27, JOPR/d-20). Most enthusiastic was teacher JOPR/e, who almost wanted to see a forced collegiality:

> I run meetings as a team leader and they don't have to come after school and they can leave at 3:30, because they just feel like leaving at 3:30. Well, as a team leader, I'm trying to get a program ready and people don't have to stay (the same as our principal) nobody really has to stay anymore after school, you can't make people stay. Then somehow or other, if this is something that an administration feels strongly about, then they're going to have to work something out. (JOPR/e-25)

School 8 ("Inner-city Innovators") - Five years before, according to teacher EPU/f, an incredible level of collegiality had been achieved. He and a handful of others had created the Integrated Studies program and saw it blossom (EPU/f-1). Now that the course was formalized, however, it seemed to be running mostly on inertia. Most of the original teachers had moved to other schools - the new replacements seemed to have been given a training session on how the program works and sent off to teach. These participants all said that they would like more

ongoing support and discussion about the fine points of the thematic units and where to find resources for their unique situation (EPU/b-26, EPU/c-27, 28).

Special Cases

The Language teachers all bitterly complained that they felt isolated in their schools due to the peculiarity of their position. The French Immersion instructors, especially felt segregated due to the language barrier – their specialty impeded them from any joint planning or really any discussions with colleagues (MCR/g-7, 18, 31, JOPR/b-33, 34, 43). ESL teacher EPU/e said she had also been alone since cuts had gotten rid of her assistants (EPU/e-9, 11). All three called for more teacher interaction and support. However, as long as they were the sole teachers of this subject in the school, they feared they would continue to lead a rather lonely existence (MCR/g-23, 37, JOPR/b-48, 49, 50, EPU/e-10, 21, 23)

Curriculum Inflexibility and Adaptability

School 1("Charitable") - A number of teachers said that they felt the new curriculum rendered some forms of integration (like themes) impossible, and that the specificity of the guidelines were more tailored for specialists (MCR/a-16, MCR/c-23, MCR/e-19, MCR/f-12). However, they felt that there were some loopholes in it for lesser forms of integration (MCR/a-14), and that in the long run the documents will begin to lose their sharper edges (MCR/d-4, MCR/f-19, MCR/h-21,22, 34). One teacher was even quite blasé about the situation, saying that no one outside the classroom can really hinder integration if a teacher really wants to do it:

> I guess all we'll do is just change the wording, the objectives and the expectations - but the bottom line is we won't change the process. ... And actually it keep you fresh, it keeps you on your toes. After teaching the same thing for about five years, it's time for change. Mind you, they give you a wide variety of units to teach so you don't have to teach the same units every year. You're still teaching the same objectives, and the same format, and the same needs the kids have - but using a different unit that's all (MCR/f-27).

School 2 ("Forces Base") - The teachers were considerably perturbed by the lack of flexibility found in the present curriculum. Each said that it prevented integration and added to the workload (ECU/b-31, 33, ECU/c-9, 21, ECU/d-1). A few teachers, in almost a guilty whisper, found that the specificity and consistency of the new guidelines gave them peace of mind, however. They would adapt to it naturally over time (ECU/a-3, 10, 11, ECU/c-25, ECU/f-1).

School 3 ("Open Option") - All three teachers agreed that they did not mind the new rigidity of the curriculum at all. In fact, two of them thought the guidelines had been too vague in the past (MPU/b-6, 21, MPU/c-42, MPU/d-1, 22). Only one teacher commented on the fact that the Geography curriculum had been too splintered:

> The geography program, incidentally, is a mess from the Ministry. ... It's just not a comprehensive program. We've had to make it up ourselves based on the strings we got from the Ministry. ... Exactly. I think if you look from the Ministry down... the Ministry doesn't seem to have a big focus with integration at all. (MPU/c-15)

School 4 ("Lone Scholar") - The teachers at this school had a universal complaint - the combination of an inflexible curriculum with a structure that demands flexibility (the split-grade system). While the principal was trying to find ways to compensate (ECR/a-9), teachers felt that one of the variables would soon have to go (ECR/d-14, 27). A few teachers did mention that the new rigid curriculum hampered any integration even at one grade level for the moment (ECR/b-1, ECR/c-1, ECR/d-34). Because it was a small, informal school with block scheduling, however, most teachers felt that they would adapt to this relatively short-term problem (ECR/b-20, 38, ECR/c-25, ECR/d-10, 11, 12).

School 5 ("Gemini") - All participants at this school were quite upset about the inflexibility of the new curriculum and its inability to absorb the activities they had designed during the Common Curriculum era (EPR/a-26, EPR/b-30, 40, EPR/c-45). The principal lamented the loss

of innovative thinking of late and hoped the teachers would not feel jaded about the quick curriculum changes (EPR/a-29, 33). She was especially afraid that the two teachers would no longer plan and teach cooperatively as they had in the past:

> Unfortunately it seemed to be connected with the Common Curriculum and that really scares me because it was and it is, an excellent tool for staff to use to develop both academic and social skills. I fear that because it was in our era anyway, introduced at a time when Common Curriculum was a real biggie - that people will now say I can't do this any more, I have to do this instead. (EPR/a-34)

School 6 ("Program Leaders") - The teachers at school 6 seemed to feel more comfortable with the more rigid structure that the new curriculum afforded. They said that it made the system more accountable and kept them on the "straight and narrow" path (MCU/b-26, 27, MCU/c-16, MCU/d-32). While they said that this structure might initially hamper them from doing any integration at the moment, they said that they would be better prepared and innovative in the future. Just like the students, they would rather have to work within a structured framework than to have total freedom (MCU/c-21, MCU/e-35).

School 7 ("Retrospective") - At this school, the participants simply mentioned the constrictions they were feeling in trying to integrate the grade levels and organizing the various strands (JOPR/b-43, 45, JOPR/c-17). Teacher JOPR/c was the most vocal about this problem:

> I don't think that there's a natural progression with the curriculum that we have. ... Lumps - teach them sections - lumps, lumps, lumps. With the curriculum in the past, I think there was a progression from the 7's to 8's ... I think teachers are used to teaching that way. You start with the basic skills in math for instance, and work your way to the more difficult stuff. You don't have that option now. ... you've got to cover all those five things in your first two and a half months. There's no way you can progress all those things and tie them all in together. (JOPR/c-10)

Otherwise, the new curriculum's structure did not hinder the other teachers.

School 8 ("Inner-city Innovators") - The teachers that responded said they loved the Integrated Studies program because of its adaptability, being able to lengthen or shorten the thematic units as they wished (EPU/c-23, EPU/f-33). However, this came into direct conflict with the new guidelines, which rigidly slotted English, History, and Geography into separate compartments. The teachers who tried to follow these documents and use the accompanying texts were having a very difficult time (EPU/b-14, 27, EPU/c-24, EPU/d-2, 20). Teacher EPU/f said that he continued to use his own resources, praised their adaptability, and said it was just business as usual (EPU/f-25, 26).

Professional Development

28 people (65%) said that professional development would be a help for them when approaching curriculum integration. However, their definition of this help varied greatly. 11 teachers requested joint release time so that they could research the topic and plan as a team (MCR/d-21, 31, 32, MCR/f-29, MCR/g-23, 34, MCR/h-41, MCR/g-37, ECR/c-31, EPU/c-26, EPR/b-47, EPR/c-43, MCU/e-41, MCU/d-47, MCU/b-35, 37). At school 7, one teacher was exceedingly keen on the notion, although she was a little skeptical about its realization:

> To me, I would *love* to do that - but that takes commitment by every member of a team. It takes an awful lot of time to plan. It takes looking and looking and looking, and working with those documents. I come back to the big T word - and unless time is actually given to teachers within school time... Maybe TA's take the kids and do something with them once a week and allow us an hour or two hours once a week - an afternoon, where the whole team can get together and freed up teachers will take those kids and do something else with them to free us to do the planning. Then we can pay them back whenever their division has some planning time, and we'll take their kids. Somehow, somewhere if that's what you really want and it's not going to happen unless that kind of thing happens - okay. (JOPR/e-25)

Some teachers felt that it would help if the administration brought in experts to show them how the new curriculum worked (ECU/a-23, ECU/d-22) or to direct them to the resources (ECU/b-34, ECR/d-33, ECR/e-33, EPR/a-29, EPU/d-21). One wily administrator said that what technically

should happen is that teachers should have a while to mull over the documents, get into jams, and then bring in experts to answer their questions (MCR/a-21).

A few teachers felt that professional development served a different purpose - that of inspiration. They said that over time educators begin to burn out because they feel that their input is futile or that they are out of touch with the bigger aims of education. An animated speaker could do much to re-infuse energy into teachers (MPU/a-36, EPR/b-38, MCU/b-32). Teacher MPU/c, for example, was able to go to a conference and then returned to share with the staff. She said this validated her work (MPU/c-36, 47). Teacher MPU/d was quite sure of its benefits:

> It doesn't matter what it would be, one that is inspirational, where all the teachers get elevated. I call it - they get their wings, they get their inspiration. ... You do definitely need all three [kinds of P.D. days]. One for your own professional growth, one for the kids with their parents and one for the inspiration. Positive talkers - like we had Bill Mitchell, we've had Jean Chretien. ... it was quite enlightening, quite elevating, it gives you a boost. (ECR/d-32)

Board Support

Out of all the teachers interviewed, only four acknowledged that they had asked for and received support from the board that year. This included expanded units (ECR/e-34, MCU/c-30), a computer hook up (JOPR/f-14), and a workshop on Multiple Intelligences (MPU/c). Others had a desire for board material, but didn't think it was essential and did not have high hopes of ever seeing it (MCR/d-33, ECU/b-27, 37, EPR/b-43, MCU/e-41). A few even had more modest requests - one teacher just wanted them to do the budget earlier so she could choose her textbooks (MCR/c-33), while the other wanted a better explanation of the new report card than she had gotten at the board's workshop (EPR/b-43). Most participants (29 or 67.4%) simply made no comment. As mentioned earlier, administrators blamed this vacuum on the state of chaos that amalgamations has caused (MCR/a-12, 21, ECR/a-18). Regardless, the vast size of the new boards had not gone unnoticed by the teachers – EPR/b quite ingenuously remarked: "Holy

mackerel - what Board? We're in the middle of a huge country with this Board. P.E.I. is smaller than this Board" (EPR/b-39).

Principal Support

At almost every school the participants said that the administration had given them ample support in the past through encouragement, the procurement of release time and the allocation of resources (MCR/b-23, MCR/d-33, MCR/e-19, MCR/f-31, MCR/g-35, 37, EPR/b-26, 41, EPR/c-24). They had little doubt that this would continue in the future (MPU/b-26, 45, MPU/c-36, 49, MCU/b-28, MCU/e-41). A few teachers remarked that they thought the principal of their particular sight had, in fact, acted beyond the call of duty in some instances. In the case of the science fair, teacher MCR/c said it never would have been started without the inspiration of the principal (MCR/c-18). Teacher EPU/f said that he had undying respect for the previous principal who had given him the freedom to start the Integrated Studies program and had then been able to perform scheduling "miracles" to formalize the program (EPU/f-30). In school 2 ("Forces Base"), a number of the participants mentioned "professional freedom" - they said that the greatest thing the principal had done was to trust them as teachers and let them get on with their work undisturbed (ECU/b-28, 35, ECU/f-27). He confirmed this view by saying that he was merely the "checkpoint" to make sure the expectations were being maintained, and not there to tell them how to get them across to the students (ECU/a-6, 12, 18, 22). Teacher MPU/b made the interesting point about "heart" - she said the last principal had simply thrown money at her, while the present one (MPU/a) actually cared about her subject. This had made a difference in her morale when she was attempting something innovative (MPU/b-26). The only negative comment was made in school 8 ("Inner-city Innovators") - the teachers complained about the incredible amount of paperwork required from the administration when they wanted to leave the school with their class (EPU/b-28, EPU/f-41).

Role Model

A number of participants said that they would be quite open to some form of mentoring system. Some just requested this to get them up to speed on how the new guidelines would work in a classroom setting (ECR/b-43). Others wanted to get insight into how other teachers handle a more integrated class or project (MCR/d-34, MCR/e-33, 37, MCR/h-44, MCU/e-42). One teacher entitled this "practical PD" (MCR/e-34). Three administrators said that they had, in the past year, tried to procure some release time so teachers could make classroom visitations and peer coaching (MCR/a-23, ECR/a-18, MPU/a-37). Only one teacher made mention of a more formalized "job shadowing" program within the board, but said that she had only heard of it, not tried it herself (ECR/e-35). The only two schools that seemed to have a real "role model" for integration were schools 7 and 8. In the former, vague mention was made of a grade 4 teacher who was a "master of integration" and informally gave advice to those seeking enlightenment at the school (JOPR/c-27). The latter has been discussed earlier - the newer teachers viewed EPU/f as their Integrated Studies guru and tried to emulate his practices as best they could (EPU/c-30, EPU/d-21).

Open Policy

Most teachers seemed to have no opinion about the number of stakeholder groups that should be involved in curriculum design (38 or 88.4%). It was simply beyond their scope and they thought the amount of people involved would have no effect on integration potential. Only teacher MPU/b made specific comment, saying that the Ministry had gone to two different extremes. The Common Curriculum had been written and validated by too many stakeholders creating a vague and mediocre document (MPU/b-1, 3), while the newest one seems to be designed by an elite group too removed from the operating core (MPU/b-41). On the receiving end, no teachers willingly admitted that they were open to input from other stakeholder groups. It seems that once the documents hit their mailboxes, the participants wanted sole control over how

it should be delivered in their classroom. The principal of school 5 ("Gemini") was the only participant who gave any credence to the importance of stakeholder acceptance (EPR/a-32).

Student Collaboration

For a great number of participants (29 or 67.4%), the concept of giving the students any control over the curriculum just never entered their minds. The remaining teachers made only vague comments on any active role students may play. A pair of teachers said that they would allow some collaboration if the students were highly academic and self-motivated (MCR/c-37) or properly trained to accept added independence (MPU/b-14). While it may be assumed that most teachers thought this implicitly, a few teachers explicitly said that they used their students as barometers for class activities. If they appeared dull and lifeless, she would try to find other approaches. In that way, they saw them as collaborators (ECU/c-21, MPU/b-61). Some teachers even said they would act on student suggestions for projects and activities, although they maintained veto power (MCR/b-25, 32, 34, 38, MCR/e-13, MCR/f-22, MCR/h-16, ECU/d-19, MPU/c-23, EPR/b-46). Only one teacher went as far as calling the students "co-creators" (MCR/g-28).

Conclusion and Discussion

In order to address the various issues raised by the preceding research with clarity, this final chapter is divided into four sections. The first examines the specific findings of this study in an effort to answer the first half of the third research question asked on page 32: "How do the Ministry and Practitioners' perspectives compare to each other?" It will also draw a composite picture of how the Ontario educational system generally views curriculum integration as an approach and the benefits derived from its use. The second section will outline the limitations of this study and explain the extent to which its findings may be applied. The third section deals with the second half of the third research question: "What factors and/or conditions explain their alignment?" The responses to this must be seen as more tentative bases for discussion than definitive conclusions. It points out the numerous themes and issues that arose from the present study and considers their potential importance for continued investigation. Finally, this chapter will outline the potential contributions that this study may have for future research and practice in this field.

Part I – Summary of Main Findings

1. Shared Aspects of the Definition

While this study rarely found any explicit statements that tied the two phases of the research together in an absolute definition of the term, there nevertheless seemed to be a great deal of tacit agreement between the Ministry and the participants on the more general, philosophical aspects. This included Dimensions A and B, which, according to Roland Case (1991), ask the more intangible questions of "What domains of knowledge are integrated into the curriculum?" and "What purpose or objective does curriculum integration serve?"

Dimension A - A Generally Shared Vision of Curriculum Elements

A number of close parallels existed between the two levels of the Ontario education system represented in this study. Specifically, there seemed to be a general synchronization concerning what elements should be integrated into the curriculum (see figure 12.1):

	Ministry	Schools
Content	Almost Universally Low (except Periods 4 & 9)	Almost Universally low
Academic Skills	A gradual increase in importance, both in overall terms to the curriculum and in terms of integratability. By Period 9 this element (especially "the basics" – reading, writing and mathematical skills) has become of paramount importance.	This element was ranked the highest (especially reading and writing) by almost all participants, even those not directly related to language skills.
Manual/Practical Skills	- In the early periods (1-3) there was an accent of "hands-on" skills such as woodworking, etc. - In the middle periods (4-6) this element ranked very low - In the later periods (7-9) this element was tied to relevance, "Practical Applications", and computer skills.	- A majority of participants ranked this high when defined as "Relevance." - A smaller number felt that "Hands-On" had some importance.
Social Skills	While being of great importance in the earlier periods, this element has shown a distinct and gradual decline	Some participants are quite committed to promoting this element. Most see "Group work" and social skills as being of secondary importance
Individual Development	Great flucuations of importance over the periods. In Periods 1 and 5, it is a paramount element, in periods 4 and 9, it is downplayed.	Seems to be a personal decision on the part of the participant to include it or not. Some are adamant in its promotion, others ignore it.
Underlying Principles	The guidelines usually only promote broad-based beliefs. In early years it was religion and partriotism. In more recent years (Period 7 onwards) it has been multiculturalism and environmentalism	In Separate Schools, the Catholic faith is promoted as an element of high secondary importance. In Public Schools, there is more of a promotion of broad based beliefs (like multiculturalism and environmentalism).

Figure 12.1 - Dimension A: Generally Shared Vision of Curriculum Elements

Content - For the past sixty years, this element has played a fairly low-level role for the Ministry, rising to prominence solely in the final period, 9. While the teachers said that they would follow the central authority's directives and make some attempt to internalize this change

in elemental priority, they also expressed their desire to maintain the traditional trend. They agreed that some content was necessary to give body to the curriculum. However, most participants were fearful that the Ministry's accent on content had the potential to degenerate into rote learning.

Academic Skills – As shown on pages 257-258, academic skills have steadily grown in importance in Ministry documents from 1938 onward. Beginning with very little notice in periods 1 and 2, this element then remained fairly segregated from other subject areas until period 6. It was only over subsequent periods that the Ministry employed a truly interdisciplinary approach, getting stronger with each era. The documents of period 6 suggested an Across-the-Curriculum method. By period 7, this became a mandated approach. By period 8, it is almost impossible to separate academic skills into distinct subject areas. In fact, skills, rather than subjects become the basic units of study. As with "content", the final period performed a volte-face to this innovation. While the new documents gave prominence to the "basic" scientific, mathematical and language skills, they also segregated them into assigned subject niches – most likely for accountability concerns (see below on pp. 430-432 concerning this aspect of integration).

The participants of the second phase of this study seem to share the conciliatory spirit of periods 6 and 7. Most pointed to the importance of academic skills in a general education, thereby making it the most readily employed element in the integration process. As well, it was commonly acknowledged that "the basics" (language skills, followed by math, computers, general research skills) represented this element. However, most participants neither agreed with the extent of integration found in the Common Curriculum, nor were they satisfied with the relative isolation of skills found in the latest, "rigorous" curriculum. Rather, participants seemed

to promote the philosophy of "Language Across the Curriculum" where language study plays an additive role in all subject areas (see pp. 311-313 for detail).

Practical/Manual Skills - While the Ministry has periodically endeavoured to integrate some form of "survival skills" into the curriculum, certain aspects of this dimension have risen and fallen over the designated periods of this study. In the early documents, this dimension was equated with the "Hands-On" approach. However, this definition faded in the 1950s, never to return to popularity. When "Practical/Manual Skills" recovered in the later periods, this element came to be likened to the more generic "Life Skills" or the ability to manage personal affairs, to be adaptable, and to be self-reliant in society. Concomitantly, this term has also meant "relevance" to life outside school. By period 9, the curriculum documents make more specific references to "practical applications" or the ability to apply abstract knowledge to a familiar situation.

Overwhelmingly, practitioners ranked this element (or more precisely "relevance") highly. This is in line with the definition put forward by the Ministry documents of the previous 4 periods. The integration of Hands-On techniques (seen in Periods 1 and 2) and career education (seen in Periods 4 or 7) played no significant role for the curriculum in schools that were interviewed.

Social Skills – While going through sporadic periods of popularity, social skills have generally been relegated to a secondary position by the Ministry. There is a general use of group work and social skills throughout periods 6 and 7, and collaboration is highly promoted for the short-lived period 8. However, by the mid-1990s, the benefits of group work were no longer mentioned in the curriculum documents. While the guidelines of Period 9 agree that students should learn

cooperative skills and citizenship training, they do not state that these aspects need to be learned through their active participation.

The interviews with practitioners in phase two reflect a similar struggle concerning this element. While most stated their belief in socializing students and helping them develop communication skills, they also expressed their deep concerns about the freedom and ensuing chaos that unbridled group work may promote (see also pp. 436-438 concerning control and integration). Arising from this dichotomy, therefore, participants only mention half-hearted attempts at group work within their classrooms.

Individual Development – While some periods made a genuine attempt to address students' individual development, this was an issue of some contention over the past sixty years. The documents of most periods either dealt with this element as "the meeting of generic adolescent needs" (periods 2, 6, 7, 8) or ignored this element altogether (as in period 9). Participants also downplayed the importance of this element in the school curriculum or in their teaching. While a small number of teachers viewed this element as central (see "the influence of Personal experience" on pp. 440-441), most felt that this element was simply outside of their job description. They referred especially to its intangible nature and difficulties in evaluation.

Underlying principles – Taken as a whole, the Ministry documents tended to shy away from the promotion of values or principles, save those that were universally accepted by contemporary society (such as environmentalism and multiculturalism, or patriotism during wartime). The only time when values came to the forefront was when the incumbent government had been elected with a certain mandate to fulfill. The NDP administration, for example, appeared to promote a very values-laden and political agenda with the issuance of the Common Curriculum. With the victory of the Conservative government and the publication of a new set of curriculum

guidelines, however, these underlying principles quickly disappeared. The interviews in Phase II indicated that most participants paid little attention to this element and usually sidestepped the issue of underlying principles unless directly faced with it in a classroom. Outside of the promotion of multiculturalism, participants agreed that the state had little business in this area. In the public schools, teachers said that they relied on their own conscience to deal with values education, while in the separate schools, teachers were more likely to refer to their interpretation of church doctrine (see also "Catholic/Public Differences" on p. 443).

Dimension B – Shared Objectives for Integration

Remaining consistent across most interviews and the last four periods was the belief in the subject-centred objectives for integration. Most specifically, the approach was considered an appropriate way of reducing content overlap, reinforcing skills, enhancing meaning for students, and overcoming fragmented thinking. One interesting phenomenon that returned repeatedly throughout this study was the assertion on the part of the Ministry and many participants that a natural unity of subject areas existed within the curriculum. They maintained that natural points of contact should be sought out and exploited for their benefits. The only place where this agreement began to break down was in any discussion concerning the generalizability of these connections, and who should be allowed to pursue these linkages. However, this had more to do with stakeholder control over the curriculum than a communication problem (see Dimensions C and E below).

Both the Ministry and the teachers display extremely mixed emotions about student-centred education. During certain eras, the Ministry strongly promoted the belief in the innate wisdom of the child (see periods 1, 2, 5) – it was an article of faith. For most of the periods, however, this sentiment was subsumed under the more onerous duty of teaching students certain skills and outcomes. This dichotomy was reflected in the participants' interviews. While most

teachers stated that they wanted to keep the students interested and motivated, this was considered an added bonus on top of the subject-centred objectives. In dealing with the new guidelines, for example, they believed it was necessary to sacrifice student-centred activities in order to transmit all of the prescribed expectations within the space of the school year.

The two sub-dimensions that were of no great concern to all stakeholder groups were "Social Continuity" and "Political Change". Both the Ministry and participants gave much the same response here as they had for Underlying Principles in Dimension A. Except for particular periods in phase I (namely period 2 or 8) or specific participants in phase II, every respondent made a point of avoiding issues that dealt with the explicit promotion of politics or social control.

For these two broad-based dimensions, therefore, there actually seems to be a great deal of shared understanding and general agreement within the system (see figure 12.2). It can be inferred from this that any lack of curriculum integration does not seem to stem from a miscommunication about *what* should be integrated and the benefits that could ensue from this approach. It must be understood from this study, however, that these connections are not based on teachers' conformity to specific, orchestrated Ministry directives. In fact, as shown below in Dimension C, there seems to be few linkages between the two in terms of tangible communication. Rather than wedded to specific government fiat of any particular period, therefore, the participants' interviews seem to reflect more general trends within the curriculum documents, and in Ontario society as a whole (this is detailed below in Part III "Themes emerging for further study").

	Ministry	Schools
Subject Unity	There existed a general acceptance of "Natural unity" & "Connections" within the curriculum for most periods	There existed a general acceptance of "Natural unity" & "Connections" within the curriculum for most participants
Student-Centred	There are great fluctuations & eventually a gradual decrease of importance of this objective by Periods 8 & 9	This is seen as a secondary priority by most participants – It is only employed to capture students' interest, reinforce relevance or for addressing various learning styles
Social Continuity	Old Fashioned Notion (popular only during wartime era)	Negligible objective
Change	This objective is only found in periods with a strong political mandate	Negligible objective

Figure 12.2 - Dimension B: Shared Objectives for Integration

2. Control over the Integration Process

The unified sense of curriculum integration, established in the previous dimensions, begins to break down when the various stakeholders discuss the specifics of the term. Rather than arguing over the root of the term, however, the basis of disagreement stems from the more pragmatic issues of inspiration for the approach, the length of time the method should be employed, and who should have control over its delivery.

Dimension C – Split Influences

This dimension (concerning inspiration and influence) represents the greatest rift between the levels of the Ontario school system. In fact, beyond the tenuous and uni-directional guidelines, little explicit communication is seen between the Ministry and the teaching population (see Figure 12.3). Almost without exception, the Ministry promotes forms of integration based upon the theoretical frameworks of contemporary scholarship. This tradition goes back to Period 1 (where the programme took its framework from the Hadow Report), continues through Period 2 (the work of Donalda Dickie on the Enterprise Method), Period 5 (the Plowden Report), and Period 8 (Integration and Outcomes-Based scholarship). Very little attempt seemed to have been made on the Ministry's behalf to go searching into the Ontario

system for grassroots inspiration or commentary. After the disbanding of the inspectorship in the 1960s, little to no program evaluation was done to see if these initiatives were being employed or even attempted at the classroom level. This is not to say that no Ministry-inspired forms of integration were ever attempted by teachers – there just exists no record of it.

The teachers who were interviewed seemed just as isolated from the Ministry when it came to inspiration. Very few actually admitted to following the guideline directives outside of the expectations. Rather, most said that the forms of integration they employed were either initiated by very personal classroom epiphanies, the influence of magnetic colleagues, school-wide themes or formalized integrated programmes. It appeared that when the teachers did not have a great feeling of personal ownership over the approach (i.e., inspiration comes from somewhere outside the school), they viewed it with suspicion and tended to be rather neutral. Even school 5 ("Gemini"), the site that had initial success with an "imposed" form of integration, displayed this tendency. Although the Ministry, the school board and the principal initially patronized the thematic approach, the teachers linked it closely to the old Common Curriculum and quickly abandoned it when the guidelines were replaced. However, while school 8 ("Inner-city Innovators") had gone through the same changes, it strongly maintained their Integrated Studies Program, fiercely proud that it was their own creation.

	Ministry	**Schools**
Inspiration	Outside Sources (usually academic from Britain or the United States)	Personal Experiences/Colleagues
Control	Early Periods (1-2) – A top-down dialogue between the Ministry documents and the teacher Middle Periods (3-8) a gradual increase of intervention by the board and school into this dialogue Period 9 – a return to the top-down Ministry – teacher dialogue	The integration project is controlled from various sources (in ascending order of importance): Administrators Co-Planning Classroom

Figure 12.3 - Dimension C: Split Influences

Dimension D – Grade Specificity Affects Integration Attempts

When the Department of Education began its first experiment with curriculum integration, it inherited an education system with only two distinct separations. A student entering school would be placed in the first grade, then move upward one grade per year until graduating at grade 12.[1] Summative exams were performed and the student moved to a whole new set of learning the next year. As such, it was a lock-step process with few links between the years. The second separation was a division between the elementary school (1-8) and secondary school (9-12). Since 1938, the Ministry has made numerous attempts to create a more flexible system. It first tried to erase the distinctions between grades 7-8 (period 1-2), then created Curriculum I:1 to combine grades 7-10 into a large indivisible "Intermediate" unit (Periods 3-6). In period 7 guidelines went as far as mixing the Intermediate and Senior levels together within the same curriculum document. The Common Curriculum went the furthest of all previous documents by eradicating all grade-specific outcomes and creating a three-year time limit (between grades 7-9). This allowed a great amount of flexibility to the schools and teachers. In comparison to these previous eight periods, "the rigorous curriculum" may be seen as revolutionary, in that it abolished this 60-year evolution and reverted back to the pre-1938 lock-step progression of grade-specific expectations. This was in all likelihood done for accountability reasons (see below concerning this issue, pp. 434-436).

While some interviews contained complaints concerning its rigidity, on the whole, participants seemed quite comfortable with the new structure of the curriculum. This was due to the fact that most of the eight schools in this study possessed grade-level systems that most closely resembled the pre-1938 model. Teachers kept their students for a year and then passed them, as a cohort, to another grade and another teacher. Inevitably, they stated that the most important forms of integration they participated in were those involving one grade level and that

these occurred over the space of one school year. In fact, most teachers indicated that integrated projects usually took considerably less time: most likely a week.

While a number of schools seemed to have been effected by the structure of the Common Curriculum during its incumbency, all interviews mention the speed of recidivism to the lock-step system once it was removed. This was seen in school 5 ("Gemini" – see pp. 301-302), in discussing the disappearance of the multi-grade thematic projects. This was also observed in school 4 ("Lone Scholar" – see pp. 298-301). The previous administration had set up a split-grade format and teachers commented that it had suited the multi-year outcomes of the Common Curriculum. With the new curriculum, however, teachers reverted back to the separate grade format and taught the two grade levels separate lessons within the same classroom. This was not dissimilar to the monitorial approach taken by the pre-1938 teachers seen on pages 52-57 (see also "Split Grades" outlined below). Lastly, it should be noted that even the most clearly integrated of schools in this study, school 8 ("Inner-City Innovators" – see pp. 306-308) kept a very rigid cohort system.

	Ministry	Schools
Completely Vertical	Very Rare	Negligible comment
Insular	A Grade 7-8 combination in periods 1-2 An Intermediate (grade 7-10) promoted from periods 3-8	Some mention made of links between grades 7-8 (especially when discussing split grades)
Upward	Some allusions to this in Period 7	Negligible comment
Downward	Seen to a large extent in Period 8 Some attempt in Period 9	Some vague comment
Horizontal	Preferred in Period 9	The paramount perimeters of most participants, especially with the new curriculum

Figure 12.4: Dimension D – Grade Specificity and its effects on curriculum integration

[1] This explanation is the ideal model. As explained on pages 52-47, many other factors interfered to disrupt this progression, most noticeably the one-room schoolhouse setting and the high drop out rate.

Dimension E – The Appearance of Integration Methods/Approaches

As mentioned earlier in this study, it was found that both the Ministry and the participants acknowledged all forms of integration put forward in the review of literature (p. 24). It should be noted, however, that while the Ministry chose quite a wide variety of approaches (depending on the period), the teaching population appears to have been much more conservative in its choices (see Figure 12.5). As categorized earlier, the forms outlined below are grouped into ***subject-supportive, decentralized-group, subject-destructive,*** and ***chameleonic***.

Subject-Supportive Forms

As mentioned on page 269, these forms of integration generally support a disciplinary system. There appears to be some synchronization between the Ministry and the participants in this study:

Nested - This method is shared by the Ministry and participants under certain instances, namely when there is a fear of accountability or a desire to insert control back into the teaching environment. This has become an especially popular form among teachers with the publication of the most recent curriculum guidelines. Because the curriculum was new and the connections between subject areas (even within subject areas) not readily apparent, teachers stated that they reverted back to this "basic" method of integration for comfort's sake. Some participants saw it as an extremely low level of integration. Others, who defined integration as including two or more subject areas, felt that the "Nested Approach" was a more disciplinary form. Most said that they would use this approach as a starting point, and after they felt comfortable with the curriculum documents would progress to higher forms of integration.

Crossdisciplinary Approach - While the Ministry tentatively promoted this approach at times when curriculum integration as a whole was being generally touted (e.g. periods 6, 7, 8), it has more often shunned this form as too advanced for elementary students. This was also voiced by

many of the participants, who felt it was out of reach of the students. The French teachers were the only participants who truly engaged in this approach. However, they treated this as a poor substitute for an immersion (harmonized) approach.

Correlation/Insertion - Both the Ministry and the participants engage in correlation on a regular basis. It is promoted as a way to connect subject areas and to reinforce relevance to the students. However, this form is never used systematically but rather as an *ad hoc* solution to issues that arise. Countless examples of this can be rendered from both the Ministry documents and the interview tapes. For example, a teacher conducting a lesson in a history class about pioneer life in Canada will be faced, at a certain point, with issues concerning geography. This type of integration (or "touching of subject areas" as a few teachers called it) arises from natural discussion rather than any advanced planning.

Decentralized Group Forms

This grouping, whose main purpose is to promote communication within the school environment, does not appear to be widely used by either the Ministry or participants on an ongoing basis.

Multidisciplinary – While the Ministry has promoted this method since period 5 onward, it has never appeared to create a consistently hospitable environment for growth. Team teaching, team planning and teacher interaction are mentioned most often as an afterthought in the Ministry documents, and dry up altogether when there is a concern for accountability. The participants' commentary mirrored this condition in the schools. While each principal and teacher emphatically argued that there was a lot of communication and collaboration between the members of the school community, they also said that most of it was rather informal. Team

teaching was never engaged in at these schools, and team planning was done usually at specific times of the year (in planning the year's calendar and for special events).

Pluridisciplinary - The Ministry first encouraged, then imposed this form in periods 7 and 8 as "programs". In the Common Curriculum, for example, a three-year time frame was given to programs to meet a certain amount of prescribed outcomes. In the final period, however, the "rigorous" curriculum chose to deal with the more specific subdivisions of courses and grade levels, all but eliminating this method of integration. The innovations of periods 7 and 8 seemed to have had no effect on the majority of participants, as well. Departments existed in none of the schools, and those who were interviewed only made very vague references to the term "program" (such as Art programs). While most referred to a number of school committees that dealt with certain issues, few felt that they had much effect on curriculum matters.

Subject-Destructive Forms

Mentioned earlier on page 276, this form of integration is used specifically to erase subject boundaries.

Fusion - While the Ministry has tried to employ this at different times in its history, the same subject configuration has essentially been maintained since 1938. If fact, there are presently less fused courses now than in period 1. The Common Curriculum did begin a short-lived revolution in favour of this form of integration (see pp. 215-233 for specifics). It would appear from the interviews, however, that the effects of Period 8 were never felt by any of the schools in this study. The only site where a fused curriculum existed was school 8 ("Inner-City Innovators"), and this was accomplished by on-site participants alone with no inspiration or aid from the Ministry.

Transdisciplinary - While the documents of period 5 and 6 contain much rhetoric about "student empowerment", most Ministry guidelines either ignore this form of integration completely or only mention it in brief asides. Almost without fail, this sentiment was reflected in the participants' interviews. To them, this form represented chaos and something unacceptable in their classroom.

Chameleonic Forms

As mentioned earlier on page 279, this category refers to those forms that may support or destroy disciplinary structure depending on the influences of the other dimensions.

Thematic - The thematic approach is, without a doubt, one of the most utilized and recognized forms of integration by both the Ministry and participants. It is also the most widely interpreted by all stakeholders, leading to the most confusion (alongside correlation). To the Ministry, as seen on pages 279 and 280, it can range from a very child-centred approach (as seen in periods 2 and 5) to the essentially subject-centred thematic units (displayed in periods 4 and 6, for example). The use of this approach also varied quite widely between the schools in this study. It ranged from the tightly designed thematic units used in School 6 ("Progam Leaders"), to the short-lived interest-driven units used in School 5 ("Gemini") under the Common Curriculum. This also included the balanced thematic/fused units used in School 8 ("Inner-City Innovators"), to the large thematic project engaged in by school 7 ("Retrospective"). As mentioned below in conclusions and Part III, the great variation of this particular form may warrant further study.

Harmonization - The Ministry employs this form extensively only between periods 6 and 8 to promote Language Across the Curriculum. This campaign has proven successful with most participants, who stated that they made an effort to deal with grammar, spelling and usage issues, even if the class was not directly concerned with language. Some even remarked about the

importance of computers, and mentioned the government incentives used to promote this in recent years. However, it must be noted that this form has not generally been seen by the Ontario education system as a priority method of integration.

Type	Form	Ministry	School	Used
Subject-Supportive Forms	***Nested***	Encouraged when the curriculum follows a transmission position	Used when rigid curriculum	Often
	Crossdisciplinary		Used most frequently by Language teachers	Rare
	Correlation	Informally mentioned in almost all curriculum guidelines	Adds material informally	Constantly used but on an *ad hoc* basis
	Insertion	Material included that doesn't fit into disciplinary niches		Rare
Decentralized Group Forms	***Multidisciplinary***	Promoted in Periods 6 & 7	Co-planning mentioned – However, opportunities dry up quickly	Some sites and guidelines
	Pluridisciplinary	Programs mentioned in some periods	Vague programs - levels	Vaguely used
Subject-Destructive Forms	***Fusion***	Only used in Period 1 & 8	Only in School 8	Isolated
	Transdisciplinary	Very rare	Never	Very rare
Chameleonic Forms	***Thematic***	Thematic Units	Varies from rigid single class to school wide	Ubiquitous
	Harmonization	Language Across the Curriculum, Computers	Language Across the Curriculum	Threaded into curriculum & practice. Strong secondary method

Figure 12.5 - Dimension E: The Appearance of Integration Methods/ Approaches

Dimensions F & G - Hindrance/Aid of Little Importance in the Decision to Integrate

The literature points out that many factors may hinder curriculum innovations (see pp. 25-28), and the Ministry periodically recognizes these as having a significant effect on deterring innovations in schools (see pp. 283-290). However, what was noticed in comparing phases I and II of this study was the lack of importance that the teachers designated to certain forms of support (see Figures 12.6 and 12.7). Primarily, this can be seen in the issue of professional development and resources. The Ministry varied greatly on the amount of aid it gave schools in regards to curriculum integration. In times of prosperity, it made great promises of support (like period 5, 6, 7), while these offers tended to dry up in times of belt-tightening (period 1, 2, 9). Although teachers expressed irritation with the loss of this assistance, it did not seem to have had a significant effect on their teaching method one way or another. The same feeling held true for the implementation timeframe. While the participants made general complaints about the speed in which the present curriculum had been implemented and the increased workload that it entailed, few felt that it would have a long-term disability on any methods they may try in the classroom. Approval of their teaching techniques from parents, the community or the board also seemed to make no appreciable difference to the teachers. As well, the expectations of secondary education, or the threat of standardized testing posed no problem for the teachers' psyche, even though the Ministry documents had hinted at this in the previous two periods.

One thing may be determined. While all the factors listed above may aid or hinder the length of time it may take teachers to do their jobs or effect their morale, it does not seem to have a significant impact on changing their teaching techniques (from more disciplinary to integrative). Professional aid, suggestions about new innovative methods or words of encouragement may bolster a teacher's confidence and give incentive. However, they will not appreciably change the course that they have embarked on.

Hindrances	Form	Ministry	School
Teacher Related	Subject Attachment	Constant	No concern
	Speedy Implementation	Low	Some concern
	Work Overload	Low	Some concern
	Balkanization	Constant	Some concern
	Threat to Career	Negligible	No concern
Curriculum related	Course Structure too Rigid	Constant	Concern
	Testing Structure too Rigid	Decreasing	Low concern
	Pressure of Higher Education	Low	Low concern
Outside forces	Lack of resources	Constant	Some concern
	Pressure from Parents/ community	Low until period 9	No concern

Figure 12.6 – Dimension F: Hindrance to the Implementation of an Integrated Curriculum

Aids to Implementation	Ministry	Schools
Professional Development	Decreasing	Some desire expressed
Additional Resources	Increasing then decreasing	Desire expressed
Role model	low	Some desire expressed
Teacher Support	Constant	Desire expressed
Adaptability of the innovation	Decreasing	Desire expressed
Open Policy of Curriculum Development	Negligible	No desire expressed
Student Involvement	Low but constant	Low desire expressed
Principal Support	Increasing until period 9	Some desire expressed
Parents/community Support	Increasing	No desire expressed
School Board Support	Increasing until period 9	No desire expressed

Figure 12.7 - Dimension G: Aids to the Implementation of an Integrated Curriculum

Overall Definition and Conclusions

A very general picture may be formulated from the above descriptions in regards to how the Ontario education system defines the term "Curriculum Integration". It sees it as a method for bringing subject areas and abstract skills together in such a way that the students may see their relevance. This can be done through the inclusion of practical examples that may cross subject boundaries. It is also seen as a way to teach academic skills more efficiently and effectively by including them in necessary, though not readily apparent, places in the curriculum. There exists no such agreed-upon policy for more intangible elements (such as individual development and underlying principles), and their inclusion is based on a particular situation rather than a province-wide conformity.

While teachers will follow curriculum structures outlined by tradition and the Ministry (i.e., the seven subject areas), they will rarely follow verbal or written suggestions made by outside forces concerning the form integration should take. Rather, the teachers who were interviewed chose the form of integration based on more idiosyncratic or school-related issues. Almost all forms of integration are seen as taking place within a limited time span (from part of a class to a few weeks) and no more. These usually consist of correlation (brought in irregularly) or thematic projects. Except for special occasions, all Ministry documents (except for the Common Curriculum) and stakeholders (except school 8) respected the subject-based format and did very little to erase any disciplinary boundaries. Curriculum Integration is seen as an additive to the disciplinary system but not as a replacement.

Conclusion 1 – A General Agreement of Definition with Variations of Form and Control

It was suggested by the literature (pp. 3-7) that the lack of development in the area of curriculum integration was greatly due to the fact that no general concrete definition of the term existed. Without that solid terminology, the various stakeholders would not be able to agree on

the benefits of the approach or the form it should take. The predicted results should have been massive miscommunications between the levels of the education system, and the eventual abandonment of integration through lack of understanding. This prognostication does not hold completely true for the Ontario situation. It cannot be denied that no common policy was ever written down or entrenched within the system, and each participant had a slightly different understanding of the term as a whole. Nevertheless there seemed to be a great deal of implicit agreement between the Ministry and the participants on the more general, philosophical aspects. The observed differences of definition within the system seem to reflect mere variations of form based on situational factors and the amount of control the stakeholders wish to hold over the approach (this is further developed below in "themes"). As D.J. Gray mentioned about the writing-across-the-curriculum movement, the idea has simply grown "untidily" (1988, p. 731).

Conclusion 2 – Curriculum Integration is as much a Situationally-Dictated Phenomenon as a Consciously Chosen Approach

A great amount of the literature (see Review of Literature section, p. 3-12) consists of the creation of ideal integration models (such as a thematic unit), based on only one dimension (namely Dimension E or "Forms") or at most two (Dimension B or "objectives"). By ignoring the other areas of the definition, however, researchers give the erroneous impression that these dimensions can work independently and therefore be inserted into any situation. They also make the assumption that practitioners have the free will to choose a form based on rational argument and persuasion alone. The present study indicates, however, that whether the stakeholder is an organization (such as a Ministry or a school) or an individual, the form they choose has more to do with norms, values, power structures and work conditions (as reflected in the other dimensions) than with outside exhortations. Specifically, the method someone or some organization will take (Dimension E) may be anticipated by the value they place on why integration is important (Dimension B), what elements they intend to use (Dimension A), and

what level of the system controls the integration process (Dimension C and D). A great deal of further research must be done, however, to determine how these links are made, and the ways in which the stakeholders interact.

Conclusion 3 – The Ontario Education System Perceives Integration as a Luxury

In this study, curriculum integration appears to have had a shifting position of importance within the Ministry's priorities and only a relatively secondary role in the various sites where interviews were conducted. What dooms this method in the Ontario system is not problems of definition, however, but the importance that all stakeholders place on this approach. In short, both the Ministry and the majority of teachers perceive curriculum integration as a luxury – an addition to the curriculum that can be used when time permits and dropped when more important agendas come along. Since the original core of subjects were created in 1938 (English, Math, Social Studies [later History and Geography], Science, Music, Art, Physical Education [and later French]) the Ministry's configuration of the school timetable has changed very little. Even at those times in history that were most open to integration, the Ministry saw the innovation as playing only a supportive role to the disciplinary system. In the past 60 years, (outside of period 8 and the periodic resurgence of social studies) no core subject areas have been added or dropped. In fact, in times of perceived crisis (such as in periods 4 and 9) most traces of integration were eradicated to make way for a more traditional structure.

This mindset is also quite prevalent at most sites in this study. On a regular basis, most teachers (outside of school 8) pointed to the more *subject-supportive* forms of integration such as the nested approach, correlation-insertion and singular multidisciplinary (in the homeroom setting). Most revealing about the entrenched disciplinary mindset that pervades the system were the discussions concerning the new guidelines. Most participants indicated that when they began to implement the curriculum, they discarded the integration practices they were doing to

pursue a more disciplinary approach. Next year, they said, they would make it more internally logical and consistent, then branch out into correlations with other subject areas.

Although there were complaints from the teachers about having to learn a new curriculum, there also seemed to be a level of comfort with the new documents. This may be related to the disciplinary basis of the guidelines as the teachers also expressed discomfort with the Common Curriculum. Outside of school 8, none had attempted to fuse the areas recommended by the previous administration. In fact, a few participants even described their anxieties about its destructive potential. In over half the schools, teachers maintained one class of students throughout most of the day and could integrate to almost any level they chose - right up to complete fusion or "integrated day". However, even in this case, they still maintained a fairly rigid disciplinary structure to the school day. All other forms of integration (namely *decentralized- group, subject-destructive, or chameleonic* forms) were done at even lower levels. Few ongoing projects between teachers were engaged in, and teachers seemed to meet for discussions on curriculum only to make certain there was no overlap between subject areas. Themes were used by most teachers but done as a special event by most. Many warned against the overuse of this method.

Part II – Limitations

It must be acknowledged that this study has some limitations:

1. This is a study of a particular area and culture. In fact, it is a study of a rather small sub-section of this group. While the first part (the curriculum documents) does represent some of the ideas and methods of a given period of time, it must not be interpreted as being the sole voice for all of Ontario. Similarly, it is felt that the 8 schools and 43 participants of this study may be somewhat representative of many members of the Ontario public school system. However, they should in no way be seen as speaking for the whole of Ontario, not even all middle school grade teachers. Ultimately, this study should be seen as nothing more than a preliminary test (a dry run, if you will) of the modified typology proposed by Case (1991). Its conclusions should be seen as having limited generalizability. The greatest hope of this researcher is that this project will encourage others to duplicate this study in other settings – other provinces, teaching situations, or literature meta-analyses.

2. Time and sanity restraints kept the study from straying much from the Middle school level (Grades 7/8). It would be expected that there would be significantly different responses from teachers at lower elementary or higher secondary levels. This would be an interesting area for future studies.

3. While the context sections of each period in Phase I of this study endeavoured to explain some of the wider concerns of the time in which the documents were created, it must be acknowledged that the conclusions for each period were derived almost solely from the analysis of the curriculum guidelines.

4. The perceptions of the participants were given in one interview session. More specific details (or changes over time) may have been ascertained if the research had been conducted

in a different manner, such as observation over a period of months. However, time restraints did not permit this. As well, the various gatekeepers (board officials and school administrators) broadly insinuated that access to the participants was allowed to me on the condition that my interviews were kept to a minimum of time. To overcome this problem, participants were allowed to examine their interview transcripts a few months later and make corrections. This would give them added time to reflect upon their responses.

5. It should also be acknowledged that this study brings the reader to no greater certainty as to the effectiveness of an integrated curriculum. It is never mentioned, in quantitatively proven terms, that children who are taught by an integrated method are better equipped to answer standardized tests or "real-life" problems than those who attend disciplinary courses. This, of course, is the objective of another thesis. The present study was limited to looking solely at how the Ministry and 43 educators define the term, perceive its uses, and implement the method.

6. Lastly, this study deals with only two levels of the Ontario public education community and makes the assumption that it reflects (more or less) the spirit of the times and the spirit of the place. For a truly accurate impression, it would behoove future researchers to seek out impressions from the other stakeholders involved – this may include personal interviews with Ministry officials, school board directors, students and parents. However, this was beyond the scope of the present study and the patience of the researcher.

Part III – Themes Emerging for Further Study

A number of tentative conclusions can be drawn from this study, which warrant further research to determine the workings of this approach. Specifically, these concern the nature of curriculum integration within the setting in which it appears, its variations from location to location, and the potential factors that are involved in effecting its application. Rather than dealing with curriculum integration as a universal or widely applicable term, therefore, certain situational aspects should be taken into consideration:

1. It is necessary for researchers to notice the general environment in which the approach is being implemented. Bolman and Deal (1991) concluded that in any organizational setting, increased clarity of the situation might be obtained by observing it through various "frames" or perspectives (p. 9). They isolate four different frames – Structural, Political, Human Relations and Symbolic. Supported by separate theory bases, each display a different aspect of the setting in which integration takes place.
2. Various specific factors may also do much to alter or readjust the way curriculum integration is implemented aside from the general backdrop mentioned above.

1. "Frames" or Perspectives that Should be Addressed when Researching Curriculum Integration

a) Structural Perspective explanations for the state of Integration in Ontario

At one level, the problem that the stakeholders seem to have with integration is one of general accountability. By pigeon-holing expectations into specific subjects at specific times, the Ministry, school administrators and teachers enjoy a sense of certainty and predictability from the structured environment. Since this study began, the Ministry has had a desire to create an accountable system. What has significantly changed over the nine periods, however, has been the Ministry's concerns for cost-efficiency, and its acceptance of teacher professionalism. In periods 1 through 4, effectiveness was carried out through a network of inspectors who (in

theory) made teachers aware of their specific duties, enlightened them to new techniques and reported on their effectiveness. Through period 5, however, the Department accorded more trust to the teachers, while at the same time creating a large network of non-hierarchical bureaucracy to deal with support. This allowed a greater amount of freedom for teachers. As accountability and cost-effectiveness became an issue under the Wells administration, however, the Ministry came under increasing pressure to create a more disciplinary, centralized and streamlined system. Through periods 7 and 8, school boards were considered the most effective means of ensuring accountability through a bureaucracy that remained close to the operating core of teachers. In the final period 9, accountability and cost-effectiveness is thought to be maintained through a severely stream-lined educational system and a disciplinary curriculum.

Teachers were also concerned with the structural issue of accountability. In the interviews, they seemed to prefer more work (as long as it was specifically designated to them) rather than the potential for a reduced workload in the future if it included some indeterminate form of sharing with colleagues (such as multidisciplinary). This may be due to their fear that their job descriptions and work outcomes will become blurred. This conclusion supports a study made by Moeller (1968), who explored the effects of bureaucratic structure on morale in 2 schools. He determined that the teachers preferred an imposition of rationality and clarity on a school structure to an ambiguous and decentralized form. The present study takes this premise further - it suggests that even if this structure is not imposed from above, teachers will create a disciplinary environment on their own initiative, unless specifically guided elsewhere. As detailed in Part II and further described below, even when homeroom teachers had a great deal of freedom to group the school day as they chose, almost all opted for a fairly disciplinary format.

What can be determined is that general concerns for accountability, division of labour and cost effectiveness, all play an important role to all levels of the Ontario education system. This should be a concern for future research.

b) Political Perspective explanations for the state of Integration in Ontario

In many instances in this study, the political theorist Bernstein (1971) appears to have been correct – rather than being lost through miscommunication or lack of clarity, some forms of integration seem to be purposefully avoided. While remaining largely unstated by all respondents (both at the Ministry and school level), there was an underlying sense that integration represented a loss of personal or central power.

In describing the political frame, Bolman and Deal (1991) refer to the inevitable struggle that various coalitions have for resources in times of scarcity (p. 186-7). This is played out in Ministry policy over the 9 periods and has a significant effect on the curriculum documents. At certain times in the Ministry's history, when there is an abundance of wealth, this loss of power could be tolerated. Under the short lived Porter Plan (Period 3), or the more successful Davis Administration (period 5), for example, locally-controlled integration was encouraged as part of a general thrust for decentralization. However, at times where the power of the central authority felt threatened, or there is a scarcity of funds, integration was the first to be eliminated. The transition between Periods 8 and 9 is a prime example. While in period 8, power over the curriculum documents (see pp. 224-226) is fairly evenly distributed between the Ministry, the school boards, principals, teachers' federations and teachers, this situation changes drastically in period 9. The Ministry makes great effort to strip all other stakeholder coalitions of their power of interpretation. Boards and Principals seem to have had their rights removed completely from the curriculum process. Furthermore, an extremely lock-step, rigid, disciplinary curriculum was put in place, removing the teachers' power to control their use of teaching method.

The majority of teachers also indicated that they were driven by a desire to control their surroundings. When they followed clearly organized themes that they decided upon, they were extremely confident and promoted it (they have ownership). However, if the theme was more school based and out of their direct control, they transmitted a growing discomfort. This feeling was magnified when they were faced with the proposition of giving any significant power to the students. Seen in Dimensions B, E and G, any student control or independence (in terms of collaboration or the employment of the transdisciplinary approach) were seen as almost taboo subjects.

Power may also be an underlying problem that keeps teachers from getting too close to one other. While all said that they were collegial, there was very little sharing of classroom time in terms of team teaching. In one of the rare instances of class swapping (ECU/f), it even led to a power struggle over teaching techniques. In all schools there was no doubt that fairly strong systems of communication existed to relay advice and even engage in long term planning. However, there appeared to be no formalized team-planning on a regular basis. In fact, when a teacher said that s/he had learned a teaching technique from another teacher s/he usually referred to it as "stealing ideas". Alongside the disciplinary norm, therefore, the archetype of the "lone scholar" still looms large – the belief that a teacher is a solitary figure who must assume sole responsibility for his or her class once the door is closed. This conclusion supports the work of Little (1990) who maintained that this icon continues to hold predominance in the North American school system. The one site that proved to be an exception to this was school 5 ("Gemini"). The two teachers here managed to break this concern over sole authority by becoming fast friends as well as colleagues.

The two levels that seem to have reached some unspoken agreement in this area have been the teachers and the present ministry – each stake out a territory of power and then hold on

to their own bailiwick. In this instance, the Ministry is the undisputed ruler of the expectations (see Part I, Period 9). In return, the documents make no mention about the methods that teachers should employ to teach these expectations, leaving it up to individual teachers to do what they wish. If past history rings true, it could be assumed that the teachers would probably ignore any method the Ministry should suggest anyway.

c) Human Relations Perspective explanations for the state of Integration in Ontario

Skinner (1948) makes an apt analogy to the importance of norm control in his novel Walden Two. He states:

> We soon found that the sheep kept to the enclosure and quite clear of the fence, which didn't need to be electrified. So we substituted a piece of string, which is easier to move around. ... [lambs] stray, but they cause no trouble and soon learn to keep with the flock. ... The curious thing is that most of the sheep have never been shocked by the fence. Most of them were born after we took the wire away. It has become a tradition among our sheep never to approach string. The lambs acquire it from their elders, whose judgement they never question. (p. 20)

Perhaps the comparison is a bit blunt (although diplomacy was never Skinner's strong point), however, in this instance the analogy has some merit. For many of the teachers, especially those in control of a homeroom class, no concrete barriers kept them from going as far with the integration process as they wished (up to the creation of an integrated day program). However, while no retribution would ensue from a teacher breaking ranks, the majority of participants kept a disciplinary structure just because that was the way things were done - over the past 60 years it had become the informal norm as well as the official structure. In fact, teachers showed great defiance to the present government's implementation of changes that went contrary to any traditional norms. Alternatively, they showed compliance to changes made by the Ministry that eradicated any "revolutionary innovations" introduced by the NDP. Even those teachers who had tried experiments in the past (like school 5) seemed to regress back to the disciplinary mode if there was not great external incentive to integrate. Only in school 8, where an Integrated

Studies program had become the norm, was there a general acceptance of integration as the status quo rather than a radical innovation.

d) Symbolic Perspective explanations for the state of Integration in Ontario

What seems to have done the integration approach more harm than good since 1938 has been the Ministry's use of it as a symbol for change and reform. In period 1 and 2, various forms of integration were promoted as a way of reassuring the public that the Department of Education was keeping up with the progressive movement in rest of North America. However, as few lasting impressions were created on the Ontario teaching population (see Context sections of Period 2, Part I), it may be assumed that this reform was more symbolic than actual. This connection (between integration and "new and progressive") surfaced again under the Davis Administration and the Common Curriculum. This has had some unintended results. Each time, after an initial success, this method has then taken on rather negative connotations. Both Minister Dunlop in the 1950s and Snobelen in the 1990s have argued successfully that integration represents a threat to the education system. Specifically, they brand this method as being chaotic, uncontrollable, ineffective and a mere degradation of the traditional system. Unfortunately, the symbolic perspective in these instances does much to obscure the more precise uses or fallibilities of curriculum integration.

2. Specific School-level Factors with the Potential for Effecting Variations in Curriculum Integration

Certain specific factors seem to be present in particular locations that would counteract the general background tendencies seen across Ontario.

a) The Influence of Personal Experience

In a number of interviews, the role that idiosyncratic experiences play in the use of integration cannot be discounted. In almost every school, one or more participants stood slightly aside from his or her colleagues and from the culture of the school as a whole. Their attitudes could not be ascribed to the environment they were living in, official directives or other stimuli outside of their control. Rather, these people had experienced some event or upbringing in their past that had given them convictions strong enough to disregard the general trend and mentality surrounding them. In school 1 ("Charitable"), for example, teacher MCU/b had been so moved by the charitable acts of the missionaries (see pp. 293-294) that she had incorporated it into her teaching method. She continued this even despite of the gentle teasing she had received from other staff members. Two other teachers (MCU/h & MPU/b) had been artists and this permeated all their curriculum. Teacher EPU/b had had what she could only describe as a "peak" experience that had cemented her teaching technique. Finally, two principals (MPU/a and ECR/a) had been exposed to extensive training at university in curriculum techniques, the former specializing in curriculum integration.

The participants described here all showed strong personal beliefs and very little susceptibility to accepting the norms of the environment unquestioningly. For these teachers, however, most seemed to stand somewhat alone from the rest of the staff in curriculum issues. It would be erroneous to believe that the community around them viewed them as outcasts. However, they all seemed to have a reputation as "lone wolves". The two principals, both

obviously strong willed people, have subsequently been transferred to other schools after serving an incumbency of two years each.

Two specific examples should be noted that show instances where personal beliefs were not strong enough to counteract the norms of the school. MCR/f and ECR/a, both fairly young and new to their schools, had returned from teaching abroad with new teaching techniques. Both had been quelled and brought into line by the community and the structure of the courses. This may have been due to the fact that the teachers had not been exposed to the innovations long enough, and that they were quite eager to be accepted by their new community.

b) The Role of Administrators in Education

In a number of schools where fairly distinctive forms of integration took hold and prospered, the administrators appeared to have played an instrumental role in its introduction and promotion. This is quite in line with recent research (see p. 30 of this study). Both Higgs (1995) and Glatthorn (1997) showed that the principal actually had a great leadership role when it came to curriculum. More than anyone else in the school, they were seen as the lynchpin between the school and the outside community (such as province and board). However, it should be noted that, in the sites of this study, this was only accomplished with the respect and support of staff members. This can be seen primarily in schools 5, 7 and 8. In school 5 ("Gemini"), the original principal believed strongly in the Common Curriculum's multidisciplinary approach. He promoted it and earmarked special blocks of time for team planning. The two teachers involved, however, were not as convinced about the merits of this approach as the principal had been. When he left and planning time dried up, so did this approach at this school.

School 7 ("Retrospective") had an annual school-wide project that seemed to be almost solely the creation of the principal and board to promote certain features of the area. It was

supported by some teachers, but merely tolerated by others who felt it robbed them of valuable class time.

At school 8 ("Inner-City Innovators"), the principal had been key in designing the Integrated Studies timetable with the support of a number of teachers, who strongly believed in the approach. The principal broadcast the success of the experiment to the board, and was subsequently transferred to another school to repeat the process. Teacher EPU/f became the unofficial person responsible for Integrated Studies and promoted it rather vocally in the interviews. The new principal even remarked that it was an important "selling point" to convince parents to send their children to the school. To a large extent, the survival of this integrated format depended greatly on its prestige.

It would seem that while the official sanction and promotion by the administration would be necessary to implement an integrated method school-wide, it did not cement its place within the school. It may survive as long as the principal was on site. When this official is replaced, however, its continued success then depends on how well the other staff members had been convinced of its importance. These results would tend to confirm recent studies concerning the implementation of curriculum integration at the school level. In Arredondo and Rucinski (1998), it was shown that the acceptance of an integrated curriculum at a particular site largely depended on the principal's perceptions and beliefs concerning the innovation and how well s/he could persuade teachers of its merits. However, in the long term, they also found that its continued success depended on the principal's creation of a formal support structure and blocks of time for planning and teaching (something that was all too rare in the schools they studied). School 8 ("Inner-city Innovators") seemed to include equal portions of the two in order to succeed. The principal created an ongoing form of systematized planning and monitoring (Mojkowski, 2000), managed to impress his own interests on the staff, yet allowed the teachers the freedom to

develop and validate new belief systems (Clark & Clark, 1996). This would seem an appropriate balance especially geared toward the middle school level (Farmer, 1995).

c) Catholic-Public School Differences

The largest difference that appeared to exist between these two types of schools can only be described as a sense "centredness". As an observer, I found the Catholic schools to be less prone to changing their integration approaches based on Ministry directives or educational fads. At each school, the teachers felt no pressure from the central authority to implement changes quickly. Rather, they said they would amend their present curriculum approaches at a rate where they felt most comfortable. As I expected, there was also a general uniformity among teacher as to how they dealt with underlying beliefs.

The public schools were less nonchalant in their relation to outside influences. The teachers appeared to be more stressed about the new curriculum guidelines and harboured the belief that they had to implement them immediately in their entirety. School 5 ("Gemini") had made major shifts of teaching approaches in the last few years based on the alterations in government opinion. Those public schools that did ignore or defer Ministry directives did not behave with the neutrality displayed by the Catholic teachers. Rather, the public school did so with outward defiance. In school 8 ("Inner-City Innovators"), the teachers showed great pride that they had created their system with no help or inspiration from central authority.

Therefore, while the public schools seemed to have an ongoing dialogue with the Ministry (either obeying or disobeying), the Catholic schools showed complete disinterest. The most ready conjecture may be that the Catholic schools have only recently been under the direct influence of the Ministry. They may also have other levels of stakeholder involvement (namely the Catholic Church), which may diffuse the preeminence of the Ministry. However, much research must be done in this area before any statement can be made with authority.

d) Urban - Rural Differences

Some general differences seemed to exist between the urban and rural public schools, although it can not be ascertained whether this was by coincidence, by norms or by design. In the two rural schools (5 and 7), a fairly rigid disciplinary model prevailed. According to participant interviews, there was a feeling of isolation between colleagues and the greater educational system. Some projects were engaged in by the school, but only as a special occasion. The two urban schools (3 and 8) had taken part in much more drastic forms of integration. The first had continued an open concept system, while the second maintained an Integrated Studies program. This would seem to indicate that the urban setting offered more hospitable conditions for integration. However, a great deal more study is needed in this area. Interestingly enough, very little visible difference distinguished the separate schools in terms of curriculum integration, regardless of their urban/rural status.

e) Elementary – Middle School Differences

It was expected that different forms of integration would be found in the two types of schools within this study. Most specifically, it was predicted that the grade 7 and 8 teachers at elementary schools would encourage a more fused curriculum in line with the rest of the levels. It was also anticipated that the Middle schools would try to emulate higher forms of education and keep more distinct subject areas. Within the literature concerning the Middle school system, a persuasive argument was also made that these segregated adolescents (at grades 7-8) would be treated differently from both elementary and secondary techniques. Primarily, it drew the readers' attention to an increased use of socialization/group work types of integration such as thematic projects. While the Ministry documents periodically reflected each of these points of view, the schools themselves remained rather uniform on this issue. Inevitably, it made little difference where the grade 7-8 students were situated. There was no appreciable difference in type of integration (either child-centred or subject-centred) between any of these schools, based

on this specification. This may have been due to the fact that whether they were included in an elementary school, a distinct Middle school, or part of a JK to OAC school, the grade 7-8 students were kept fairly isolated. At each site, the majority of teachers were held responsible for teaching only one or, at most, two grade levels.

3. Methods of Integration by Design

a) The Role of Curriculum Overload and "Integration for Survival"

One indirect means of forcing curriculum integration, displayed by the latest curriculum, has been the inclusion of an increased number of expectations. Teachers said that they found it impossible to dwell on one expectation at a time - they decided they either had to extend the school year or find connections between them to "kill two birds with one stone" (or integration for survival). However, it still does not seem to promote forms beyond *subject-supportive* and rarely forms beyond the individual classroom level.

b) Specialized Curriculum Inhibits Integration, but the Reverse is Not Necessarily Correct

The last two guidelines put out by the Ministry display the significant effects that can be made by increasing or decreasing subject specificity. Under the Common Curriculum, a great deal of flexibility was allowed at the school level. This caused a deal of discomfort to the teachers but it also (by design) encouraged a great deal more decentralized forms of integration and sharing. They *had* to meet to sort out who was going to teach which outcomes. It also allowed the possibility of much more intense forms of integration (themes, for example), even though the teachers did not seem to willingly engage in them. This did not guarantee these forms of integration, but at least allowed the potential for such forms. The new guidelines, because they are so subject-specific and organized in tighter strands to be reported on at regular intervals, seem to curtail that activity. The teachers are not specifically dissuaded from integrating - the new situation just does not allow it. Because of time concerns and the division of expectations,

teachers would have to go to extraordinary lengths to do the same themes explained by the Common Curriculum. Because of the precise allocation of subject-specific expectations, teachers no longer have the need to meet and decipher the guidelines.

c) The Issue of Split Grades

This factor has been discussed at greater length in Part II of this study. What can be concluded is that split-grades may allow greater inter-grade integration if the guideline expectations are broad enough. However, if the guidelines contain rigid, grade-specific expectations (like that of period 9), this form of integration is rendered impossible. A monitorial system as seen on pages 53-55 must then be put in place.

d) Differences in Homeroom/Rotary Based Schools

This has also been discussed in extensively in Part II of this study. If the structural perspective is solely taken into consideration, the homeroom system should give the teacher a vastly increased amount of freedom. Rather than officially beginning and stopping classes based on time-limited segments throughout the day, the administration allows teachers to allocate time to students' specific needs. However, the interviews in this study seem to indicate that teachers still continue to follow a rotary-like system of subject-based courses throughout the day. They ascribe this format to the design of the curriculum and informal norms reinforced in the school.

4. The Future of Integration in Ontario and Changing the Venue

The Ontario public school system seems to be playing out a pattern that is not unlike that seen in the literature on curriculum integration (displayed in pp. 5-7 of the introduction). On the one side remains the Ministry, which continues to propose theoretical scenarios. With little empirical evidence in its favour, the innovation becomes a political football and is usually kicked out of the educational arena when the next set of guidelines is drawn up. Within a generation, virtually the same form of integration under a new name returns to go through the same process. On the other side of this system remain the teachers who tend to stay in isolated pockets, developing approaches through "action research" methods that usually die with their retirement. Brophy's (1991) comment concerning "try, fail, and try again" is an appropriate observation of the situation. There is a negative outcome of this "two solitudes" situation. Rather than a logical evolution of the innovation through implementation, evaluation, feedback and correction, curriculum integration at the Ministry level continues to be mired in a never-ending cycle of boom and bust, period after period. Teachers, as well, are left to walk their own paths like pilgrims, wondering if they are going in the right direction.

To overcome the problems found in this system, and avoid the inevitable cycle, a fundamental issue must be resolved. This study has found that the greatest deterrent to the widespread utilization of integration was its promotion as an innovation. Proponents treat it as a "cause celebre" - it is suggested, defended, explained, and proselytized to teachers. However, it is still considered by most stakeholders in the system as a radically "newfangled idea" (even though it has been continually proposed in the curriculum documents for over 60 years). It has never been internalized by teachers or the Ministry as the status quo - that place is reserved for disciplinary teaching. For all its promotion, the only way the Ministry would see any widespread use of integration in the Ontario education system would be by changing the way it is viewed

and approached. As seen in school 8, the only time teachers felt truly comfortable with the method and used it regularly was when it was considered the commonplace norm - "what is done around here". As long as it is viewed as a revolutionary experiment of some kind, it will be continually marginalized and subjected to faddish trends.

The work of Karl Weick (1976, 1982) regarding "loosely-coupled systems" would seem to be an appropriate paradigm in which researchers and innovators should view the Ontario system. Certain couplings exist within the Ontario education system that link communication and control. What is necessary is that these must be utilized in order to promote innovations in any widespread and systematic fashion throughout the system. Teacher EUP/f at school 8 ("Inner-City Innovators") vocalized this sentiment quite well. He stated that over time a grassroots method had started to overcome the problem of isolation. The Integrated Studies program, begun at his school, had grown in an almost organic fashion within the board. When the principal moved, he recreated it at another school. Other schools copied this approach over the past ten years, the teacher then explained. At present, he stated that about thirty percent of schools in his board treated the Integrated Studies program as "what we do around here". He speculated that, given enough time and success, it could become a board wide policy, then adopted by the Ministry as province-wide policy. However, he then took a deep breath and resolved that the links of communication were not strongly enough coupled between the various levels of the system to act in such accord. The historical findings of Dimension C would unfortunately support this conclusion.

Part IV - Implications for Research and Practice

1. The Importance of the Typology Method in defining Curriculum Integration

> I had hoped to find research to support or to conclusively oppose my belief that quality integrated education is the most promising approach. For every study that contains a recommendation, there is another, equally well documented study, challenging the conclusions of the first...No one seems to agree with anyone else's approach. But more distressing: no one seems to know what works. (Senator Fritz Mondale as quoted in Bangert-Drowns & Rudner, 1991)

This quotation illustrates a common plight. In the *Review of Literature* it was noted that the term "curriculum integration" suffered from the lack of any clear definition. From this, research on integration often produces contradictory results. As well, literature on this topic is so extensive as to obscure trends with an overwhelming amount of information. Thousands of articles, reports and research projects have sat idle, simply because no connections or generalizability can be established. Furthermore, with no clear conception, practitioners shy away from this promising yet ambiguously vague notion. Due to this problem, this approach has been hobbled for the greater part of this century as an effective aid to the education process. Rather than a continued search for a sole definition, the findings of this study indicates that there is much merit in looking at the term from a more constructivist perspective. Specifically, it showed the use that a typology method, such as Case's "Anatomy of Curricular Integration" (1991), has for exposing meanings and gaps in communication that would otherwise have been left implicit.

As this study amply displays, it is perhaps naïve to think that a concrete definition of this term would hold steady over time and space. Indeed, it has trouble holding meaning within one school setting. However, with the use of a typology, linkages can be made between sites and documents. In fact, this typology would appear to be an excellent tool for a meta-analysis to collate and find commonalties in definitions between the vast amount of literature on curriculum integration – it would show the expanse to which authors have taken the term and list the precise

uses in specific circumstances. As such, it may do much to bring the seemingly disparate literature closer together as a more transferable body of knowledge. The dimension format could show, in precise detail, where any two studies run parallel or diverge.

2. The Importance of the Typology Method for Practitioners

For the practitioner, this typology also goes a long way to break the either/or dichotomy that has marginalized the approach for so long. Using older standards, only one historical period (the Common Curriculum of the 1990s) and one teacher (MPU/f) would be considered truly integrated. Presently, most periods and participants were shown by the typology as integrating in one form or another. This does much to de-stigmatize the approach and bring it into the mainstream of education. As mentioned in the Review of Literature, Fisher (1990) displayed dissatisfaction with the word "integration" based on the connotations it had as a panacea. One could not oppose it for fear of looking evil or narrow-minded. Similarly, when teachers interpret integration by using the continuum approach, they tended to think in terms of an ideal form of integration that they were working towards. This made them disparage themselves for not getting to this level at a faster rate and blaming the environment for their perceived failure. When the term is broken down logically into more precise "formal components", however, this monolithic appeal fades away. It ceases to be universally good or evil – if defined and described situationally, its uses and form becomes much more precise. Once this is performed, educators may then embrace or oppose the approach boldly – not based on vague hopes or uneasiness, but on clear philosophical principles and practical utility.

3. The Use of Empirical Data

It is felt that the raw data rediscovered by this research, especially the earlier curriculum documents long discarded, could do much to aid policy preparation at the ministerial level, as

well as provide enlightenment for teachers, interested academics and Ontario residents. Too often in the past decisions concerning integration have been based on faith in the method or rather scanty evidence. This bulk of material could now permit officials and other stakeholder groups to reflect on the past activities that their predecessors have engaged in – to see what has been successful and what has not. This could allow the promotion of curriculum integration based on evolutionary research and systematic trial rather than on political agenda.

4. The Importance of a Multi-level study

Lastly, it was mentioned at the beginning of this study that one of the most serious problems continually plaguing research into curriculum integration has been the isolation in which it has been carried out. As mentioned in the Review of Literature, theoreticians and governments have dispersed a great number of models and policies with great detachment from the intended practitioners. At the same time, Action Researchers report on rather idiosyncratic case studies or implement curriculum integration on a relatively *ad hoc* basis. In other words, the provincial education system has been so loosely coupled that researchers have a very difficult time to observe, analyze and make connections between its various levels (Weick, 1976).

It is hoped that researchers will see this multi-study approach as being of great importance because it enables observation of the integration process across these numerous levels. For one of the first times in the history of integration research, both theoretical (Ministry) and practical (the 8 schools) perspectives on integration have been folded together into one study. In this very loosely-coupled system, this method of observation will show where the coupling occurs and where the connections don't exist. In this study, for example, it was shown that the curriculum documents themselves joins the Ministry to the teachers in a direct and unidirectional linkage. The role of the school boards, on the other hand, seems to provide a much weaker alliance. Only ongoing research of this nature, such as the present study and that

of Miller et al (1997) would ensure that integration forms suited to a situation are being recognized and promoted. As to the particular case study in question, Ontario's educational community, it would enable the Ministry to receive feedback from front-line educators (teachers and administrators) on how they have used the Ministry's suggestions and adapted to conditions of the new curriculum. Otherwise, past behaviour may dictate the future of curriculum integration – whimsical promotion by the Ministry, reticence by the teacher, and a general isolation of the levels of the educational hierarchy.

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AO = Archives of Ontario
MAR = Annual Report of the Minister of Education

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Appendix A

Documents used for Phase 1, Codes and Corresponding Page Numbers

Period 1 Documents (1938-1941)

1A – Programme of Studies for Grades VII & VIII of Public & Separate Schools (1938)

1A-1 (p. 3);1A-2 (p. 3);1A-3 (p. 5);1A-4 (p. 5);1A-5 (p. 6); 1A-6 (pp. 6-7); 1A-7 (p. 7); 1A-8 (p. 8); 1A-9 (p. 8); 1A-10 (p. 8); 1A-11 (pp. 8-9); 1A-12 (p. 9); 1A-13 (pp. 9-10); 1A-14 (p. 10); 1A-15 (p. 10-11); 1A-16 (p. 11); 1A-17 (p. 11); 1A-18 (pp. 11-12); 1A-19 (p. 13); 1A-20 (p. 13); 1A-21 (pp. 13-14); 1A-22 (p. 14); 1A-23 (p. 14); 1A-24 (pp. 15-19); 1A-25 (pp. 22-24); 1A-26 (p. 26); 1A-27 (pp. 27-30); 1A-28 (p. 31); 1A-29 (pp. 46-47); 1A-30 (p. 47); 1A-31 (p. 48); 1A-32 (pp. 50-55); 1A-33 (p. 56); 1A-34 (p. 56); 1A-35 (p. 57); 1A-36 (pp. 58-68); 1A-37 (p. 69); 1A-38 (p. 69); 1A-39 (p. 70); 1A-40 (p. 70); 1A-41 (pp. 70-74); 1A-42 (p. 77); 1A-43 (p. 77); 1A-44 (p. 78); 1A-45 (p. 82); 1A-46 (p. 83); 1A-47 (p. 83); 1A-48 (p. 83); 1A-49 (p. 84); 1A-50 (pp. 84-86); 1A-51 (p. 87); 1A-52 (p. 88); 1A-53 (p. 88); 1A-54 (p. 88); 1A-55 (p.89); 1A-56 (p. 92); 1A-57 (p. 98); 1A-58 (p. 98); 1A-59 (p. 99); 1A-60 (p. 99); 1A-61 (p. 105); 1A-62 (p. 105); 1A-63 (p. 105); 1A-64 (pp. 105-106); 1A-65 (p. 106); 1A-66 (p. 106); 1A-67 (p. 106).

Period 2 Documents (1942-1949)

2A - Programme of Studies for Grades VII & VIII of Public & Separate Schools (1942)

2A-1 (p. 3); 2A-2 (p. 3); 2A-3 (p. 5); 2A-4 (pp. 5-6); 2A-5 (p. 6); 2A-6 (p. 6); 2A-7 (p. 6-7); 2A-8 (p. 7); 2A-9 (p. 8); 2A-10 (p. 8); 2A-11 (p. 8); 2A-12 (p. 8); 2A-13 (p. 9); 2A-14 (p. 9); 2A-15 (p. 10); 2A-16 (p. 10); 2A-17 (p. 11); 2A-18 (p. 11); 2A-19 (p. 12); 2A-20 (p. 13); 2A-21 (p. 13); 2A-21 (p. 13); 2A-22 (p. 13); 2A-23 (p. 14); 2A-24 (p. 14); 2A-25 (pp. 14-15); 2A-26 (p. 15); 2A-27 (p. 15); 2A-28 (pp. 15-16); 2A-29 (p. 16); 2A-30 (pp. 16-17); 2A-31 (p. 17); 2A-32 (p. 17); 2A-33 (p. 18); 2A-34 (p. 18); 2A-35 (p. 18); 2A-36 (p. 18); 2A-37 (p. 19); 2A-38 (p. 19); 2A-39 (p. 19); 2A-40 (pp. 19-20); 2A-41 (p. 20); 2A-42 (p. 20); 2A-43 (pp. 20-21); 2A-44 (pp. 22-23); 2A-45 (p. 26); 2A-47 (p. 27); 2A-48 (pp. 28-29); 2A-49 (p. 29); 2A-50 (p. 30); 2A-51 (pp. 30-34); 2A-52 (pp. 35-39); 2A-53 (p. 40); 2A-54 (p. 41); 2A-55 (p. 41); 2A-56 (p. 41-42); 2A-57 (p. 42); 2A-58 (pp. 43-57); 2A-59 (p. 58); 2A-60 (p. 58); 2A-61 (p. 58); 2A-62 (pp. 58-59); 2A-63 (p. 59); 2A-64 (p. 59); 2A-65 (pp. 59-60); 2A-66 (pp. 60-61); 2A-67 (p. 61); 2A-68 (pp. 62-64); 2A-69 (pp. 64-68); 2A-70 (p. 69); 2A-71 (pp. 69-70); 2A-72 (p. 69); 2A-73 (p. 70); 2A-74 (p. 71); 2A-75 (pp. 72-84); 2A-76 (p. 85); 2A-77 (p. 85); 2A-78 (p. 86); 2A-79 (p. 86); 2A-80 (p. 87); 2A-81 (pp. 87-88); 2A-82 (pp. 83-93); 2A-83 (pp. 94-95); 2A-84 (p. 99); 2A-85 (p. 100); 2A-86 (p. 100); 2A-87 (p. 100); 2A-88 (p. 101); 2A-89 (p. 101); 2A-90 (pp. 101-104); 2A-91 (p. 105); 2A-92 (p. 105); 2A-93 (p. 106); 2A-94 (p. 106); 2A-95 (pp. 106-107); 2A-96 (p. 110); 2A-97 (p. 110); 2A-98 (p. 110); 2A-99 (pp. 110-111); 2A-100 (pp. 111-115); 2A-101 (pp. 116-121); 2A-102 (p. 122); 2A-103 (p. 122); 2A-104 (p. 123); 2A-105 (p. 123); 2A-106 (p. 123); 2A-107 (p. 124).

2B – Regulations and Programmes for Religious Education in Public Schools (1949)

2B-1 (p. 2); 2B-2 (p. 5); 2B-3 (p. 5); 2B-4 (p. 6); 2B-5 (p. 7); 2B-6 (p. 8); 2B-7 (p. 8); 2B-8 (p. 8); 2B-9 (pp. 8-9); 2B-10 (p. 9); 2B-11 (pp. 9-10); 2B-12 (p. 10); 2B-13 (p. 10); 2B-14 (p. 11); 2B-15 (p. 11); 2B-16 (p. 12); 2B-17 (p. 13); 2B-18 (p. 13); 2B-19 (pp. 14-15); 2B-20 (p. 15); 2B-21 (p. 15); 2B-22 (p. 16); 2B-23 (p. 16); 2B-24 (p. 16); 2B-25 (p. 16); 2B-26 (p. 16-17); 2B-27 (p. 17); 2B-28 (p. 17); 2B-29 (p. 17); 2B-30 (pp. 17-18); 2B-31 (p. 18); 2B-32 (p. 20); 2B-33 (p. 25); 2A-34 (p. 25); 2B-35 (pp. 25-26); 2B-36 (p. 26).

Period 3 Documents (1949-1958)

3A – Memorandum Re: Revision of Curriculum (1949)

3A-1 (p. 3); 3A-2 (p. 3); 3A-3 (p. 7-8); 3A-4 (p. 8); 3A-5 (p. 8); 3A-6 (p. 8); 3A-7 (pp. 9-10); 3A-8 (p. 10); 3A-9 (p. 10); 3A-10 (p. 11); 3A-11 (p. 11)

3B – Memorandum Re: Establishment of Local Committees on Curriculum (1950)

3B-1 (p. 3); 3B-2 (pp. 3-4); 3B-3 (pp. 4-5); 3B-4 (p. 5); 3B-5 (p. 6); 3B-6 (p. 6); 3B-7 (p. 6)

3C – Intermediate Division (Grades 7, 8, 9, 10), Outline for Experimental Use (1951)

3C-1 (pp. 3-4); 3C-2 (p. 4); 3C-3 (pp. 7-8); 3C-4 (p. 8); 3C-5 (p. 8); 3C-6 (p. 8); 3C-7 (pp. 8-9); 3C-8 (p. 9); 3C-9 (p. 10); 3C-10 (p. 11); 3C-12 (p. 15); 3C-13 (p. 18); 3C-14 (p. 19); 3C-15 (p. 19); 3C-16 (p. 20); 3C-17 (p. 21); 3C-18 (p. 22); 3C-19 (p. 23); 3C-20 (p. 23); 3C-21 (p. 24); 3C-22 (p. 24); 3C-23 (p. 24); 3C-24 (p. 24); 3C-25 (p. 25); 3C-26 (p. 25); 3C-27 (p. 26); 3C-28 (p. 26); 3C-29 (p. 27); 3C-30 (p. 27); 3C-31 (p. 27); 3C-32 (p. 28); 3C-33 (p. 28); 3C-34 (p. 28); 3C-35 (pp. 29-30); 3C-36 (p. 31); 3C-37 (p. 31); 3C-38 (p. 32); 3C-39 (p. 34); 3C-40 (p. 35); 3C-41 (p. 35); 3C-42 (p. 36); 3C-43 (p. 36); 3C-44 (p. 37); 3C-45 (pp. 37-38); 3C-46 (p. 38); 3C-47 (p. 39); 3C-48 (p. 39); 3C-50 (p. 41); 3C-51 (p. 42); 3C-52 (p. 42); 3C-53 (p. 42); 3C-54 (p. 45); 3C-55 (p. 45); 3C-56 (p. 45); 3C-57 (p. 49); 3C-58 (pp. 50-51); 3C-59 (p. 53); 3C-60 (p. 53); 3C-61 (p. 53); 3C-62 (p. 58); 3C-63 (p. 58); 3C-64 (p. 58); 3C-65 (p. 58); 3C-66 (p. 59); 3C-67 (p. 59); 3C-68 (p. 59); 3C-69 (p. 59); 3C-70 (p. 59); 3C-71 (pp. 59-60); 3C-72 (p. 60); 3C-73 (p. 60); 3C-74 (p. 60); 3C-75 (p. 61); 3C-76 (p. 62); 3C-77 (pp. 62-64); 3C-78 (pp. 64-72); 3C-79 (pp. 72-73); 3C-80 (pp. 73-75); 3C-81 (pp. 75-77); 3C-82 (pp. 78-85); 3C-83 (pp. 85-92); 3C-84 (pp. 92-95); 3C-85 (p. 141); 3C-86 (p. 141); 3C-87 (p. 141); 3C-88 (pp. 141-142); 3C-89 (p. 142); 3C-90 (p. 143); 3C-91 (p. 144); 3C-92 (pp. 144-145); 3C-93 (pp. 145-145); 3C-93 (pp. 145-149); 3C-94 (p. 150); 3C-95 (pp. 151-154); 3C-96 (p. 155); 3C-97 (p. 168); 3C-98 (p. 169); 3C-99 (p. 170); 3C-100 (p. 170); 3C-101 (p. 171); 3C-102 (p. 171); 3C-103 (p. 171); 3C-104 (pp. 173-186); 3C-105 (pp. 186-199); 3C-106 (p. 223); 3C-107 (p. 224); 3C-108 (p. 228); 3C-109 (p. 228); 3C-110 (pp. 228-229); 3C-111 (p. 229); 3C-112 (p. 229); 3C-113 (pp. 230-233); 3C-114 (pp. 236); 3C-115 (p. 236); 3C-116 (p. 238); 3C-117 (p. 246); 3C-118 (p. 246); 3C-119 (pp. 246-247); 3C-120 (pp. 248-265); 3C-121 (p. 266); 3C-122 (p. 266); 3C-123 (p. 266); 3C-124 (p. 267); 3C-125 (pp. 267-268); 3C-126 (pp. 268-269); 3C-127 (p. 269); 3C-128 (p. 269); 3C-129 (p. 269); 3C-130 (p. 270); 3C-131 (p. 270); 3C-132 (p. 270); 3C-133 (p. 271); 3C-134 (p. 271); 3C-135 (pp. 271-272); 3C-136 (pp. 272-273); 3C-137 (p. 273); 3C-138 (pp. 273-274); 3C-139 (p. 274); 3C-140 (pp. 275-278); 3C-141 (p. 279).

3D – Memorandum Re: Curriculum Progress of the Revision (1952)

3D-1 (p. 2); 3D-2 (p. 2); 3D-3 (p. 3); 3D-4 (p. 3); 3D-5 (pp. 3-4); 3D-6 (p. 4)

3E – Guidance (1950)

3E-1 (p. 7); 3E-2 (p. 7); 3E-3 (p. 8); 3E-4 (p. 8); 3E-5 (p. 9); 3E-6 (p. 10); 3E-7 (p. 11); 3E-8 (p. 12); 3E-9 (p. 26); 3E-10 (p. 27); 3E-11 (p. 28); 3E-12 (p. 29); 3E-13 (p. 30); 3E-14 (p. 31); 3E-15 (p. 32); 3E-16 (p. 33); 3E-17 (p. 34); 3E-18 (p. 46); 3E-19 (p. 47)

Period 4 Documents (1959-1967)

4A – History (1959)

4A-1 (p. 1); 4A-2 (p. 2); 4A-3 (pp. 2-3); 4A-4 (p. 3); 4A-5 (p. 3); 4A-6 (p. 3); 4A-7 (p. 4); 4A-8 (p. 4); 4A-9 (p. 4); 4A-10 (p. 4); 4A-11 (pp. 6-11); 4A-12 (pp. 12-20).

4B – Guidance (1961)

4B-1 (p. 6); 4B-2 (pp. 7-10); 4B-3 (p. 13); 4B-4 (p. 14); 4B-5 (p. 23); 4B-6 (p. 18); 4B-7 (p. 24); 4B-8 (p. 25); 4B-9 (p. 26); 4B-10 (p. 27).

4C – Science (1961)

4C-1 (p. 4); 4C-2 (p. 4); 4C-3 (pp. 4-5); 4C-4 (p. 5); 4C-5 (p. 5); 4C-6 (pp. 5-6); 4C-7 (p. 6); 4C-8 (p. 6); 4C-9 (p. 6); 4C-10 (pp. 6-7); 4C-11 (p. 7); 4C-12 (p. 7); 4C-13 (p. 7); 4C-14 (pp. 7-8); 4C-15 (p. 8); 4C-16 (p. 8); 4C-17 (p. 8); 4C-18 (pp. 8-9); 4C-19 (pp. 9-24); 4C-20 (pp. 24-40); 4C-21 (pp. 40-50); 4C-22 (pp. 51-60).

4D – Geography, History and Government, Social Studies (1962)

4D-1 (p. 1); 4D-2 (p. 3); 4D-3 (pp. 3-4); 4D-4 (p. 4); 4D-5 (p. 4); 4D-6 (p. 4); 4D-7 (p. 5); 4D-8 (p. 5); 4D-9 (p. 5); 4D-10 (p. 6); 4D-11 (p. 6); 4D-12 (p. 7); 4D-13 (p. 8); 4D-14 (p. 8-23); 4D-15 (p. 10); 4D-16 (p. 11); 4D-17 (pp. 23-24); 4D-18 (pp. 25-45); 4D-19 (pp. 46-55); 4D-20 (pp. 55-65); 4D-21 (pp. 66-75); 4D-22 (p. 76); 4D-23 (p. 76); 4D-24 (p. 76); 4D-25 (p. 76); 4D-26 (p. 77); 4D-27 (p. 77); 4D-28 (p. 77); 4D-29 (p. 78); 4D-30 (p. 78); 4D-31 (pp. 78-79); 4D-32 (p. 79); 4D-33 (p. 79); 4D-34 (p. 79); 4D-35 (p. 80); 4D-36 (p. 81); 4D-37 (p. 81); 4D-38 (pp. 83-88); 4D-39 (pp. 89-101); 4D-40 (p. 101); 4D-41 (p. 101); 4D-42 (p. 102); 4D-43 (pp. 103-111); 44D-44 (p. 111); 4D-45 (p. 126); 4D-46 (p. 127).

4E – Mathematics (1964)

4E-1 (pp. 1-2); 4E-2 (p. 2); 4E-3 (p. 2); 4E-4 (pp. 2-3); 4E-5 (p. 4); 4E-6 (p. 5); 4E-7 (p. 6); 4E-8 (pp. 16-16); 4E-9 (p. 11); 4E-10 (p. 1a); 4E-11 (p. 1a); 4E-12 (p. 1a); 4E-13 (p. 1a); 4E-14 (p. 2a); 4E-15 (pp. 2-16a).

4F –Home Economics (1964)

4F-1 (p. 3); 4F-2 (p. 3); 4F-3 (p. 3); 4F-4 (p. 3); 4F-5 (p. 4); 4F-6 (p. 4); 4F-7 (p. 4); 4F-8 (p. 5); 4F-9 (p. 7); 4F-10 (p. 36); 4F-11 (p. 40).

4G – Physical and Health Education (1966)

4G-1 (p. 1); 4G-2 (p. 1); 4G-3 (p. 3); 4G-4 (p. 4); 4G-5 (p. 5); 4G-6 (p. 5); 4G-7 (p. 6); 4G-8 (p. 7); 4G-9 (p. 8); 4G-10 (p. 8); 4G-11 (pp. 9-15).

4H – French (1966)

4H-1 (p. ii); 4H-2 (p. ii); 4H-3 (p. ii); 4H-4 (p. iii); 4H-5 (p. iii); 4H-6 (p. iii); 4H-7 (p. iii); 4H-8 (p. 1); 4H-9 (p. 4); 4H-10 (p. 5); 4H-11 (p. 5); 4H-12 (p. 5); 4H-13 (p. 5); 4H-14 (p. 5); 4H-15 (p. 6); 4H-16 (p. 6); 4H-17 (p. 7-15).

4I – Vocal Music (1967)

4I-1 (p. 1); 4I-2 (p. 3); 4I-3 (p. 4); 4I-4 (p. 5); 4I-5 (p. 6); 4I-6 (p. 7); 4I-7 (p. 8); 4I-8 (p. 38).

Period 5 Documents (1967-1975)

5A – Guidance (1968)

5A-1 (p. 5); 5A-2 (p. 5); 5A-3 (p. 5); 5A-4 (p. 7); 5A-5 (p. 11); 5A-6 (p. 11); 5A-7 (p. 11); 5A-8 (p. 11); 5A-9 (p. 11); 5A-10 (p. 11); 5A-11 (pp. 14-15).

5B – Art (1968)

5B-1 (p. 3); 5B-2 (p. 3); 5B-3 (p. 3); 5B-4 (pp. 3-4); 5B-5 (p. 4); 5B-6 (p. 5); 5B-7 (p. 5); 5B-8 (p. 5); 5B-9 (p. 6); 5B-9a (p. 6); 5B-9b (p. 6); 5B-9d (pp. 6-7); 5B-9e (p. 7); 5B-10 (p. 7); 5B-11 (p. 7).

5C – English (1969)

5C-1 (p. 3); 5C-2 (p. 3); 5C-3 (p. 3); 5C-4 (p. 3); 5C-5 (p. 5); 5C-6 (p. 5); 5C-7 (p. 6); 5C-7a (p. 6); 5C-7b (p. 8); 5C-8 (p. 9); 5C-9 (p. 9); 5C-10 (p. 11); 5C-11 (p. 12); 5C-12 (p. 14); 5C-13 (p. 11); 5C-14 (p. 15); 5C-15 (p. 15).

5D – Latin and Greek (1969)

a (p. 1); b (p. 1); c (p. 2); 5D-1 (p. 2); 5D-2 (p. 2); 5D-2a (p. 3); 5D-3 (p. 3); 5D-3a (p. 4); 5D-4a (p. 6); 5D-4b (p. 6); 5D-4c (p. 6); 5D-4d (p. 7); 5D-4e (p. 10).

5E – Screen Education (1970)

5F – Basic Business Typing (1971)

5F-1 (p. 5); 5F-2 (p. 6).

5G – Consumer Studies (1972)

5G-1 (p. 1); 5G-2 (p. 1); 5G-3 (p. 4); 5G-4 (p. 8); 5G-5 (p. 8); 5G-5a (p. 8); 5G-5b (p. 8); 5G-6 (p. 9); 5G-7 (p. 9).

5H – Informatics (1972)

5H-1 (p. 3); 5H-2 (p. 3); 5H-3 (p. 3); 5H-4 (p. 4); 5H-5 (p. 4); 5H-5a (p. 7); 5H-6 (p. 7); 5H-7 (p. 7); 5H-8 (p. 7); 5H-9 (pp. 8-16).

5I – Science (1972)

5I-1 (p. 4); 5I-2 (p. 4); 5I-3 (p. 5); 5I-4 (p. 5); 5I-5 (p. 5); 5I-6 (p. 5); 5I-7 (p. 6); 5I-8 (p. 6); 5I-9 (p. 6); 5I-10 (p. 7); 5I-11 (p. 7); 5I-12 (p. 7); 5I-13 (p. 8); 5I-13a (p. 8); 5I-13b (p. 8); 5I-13c (p. 8); 5I-14 (p. 9); 5I-15 (p. 9); 5I-16 (p. 9); 5I-16a (p. 9); 5I-17 (p. 9); 5I-17a (p. 10); 5I-18 (p. 10); 5I-18a (p. 11); 5I-19 (p. 11); 5I-20 (p. 11); 5I-21 (p. 12); 5I-22 (p. 12); 5I-23 (p. 12); 5I-24 (p. 12); 5I-25 (p. 13); 5I-26 (p. 13); 5I-27 (p. 13); 5I-28 (p. 14); 5I-29 (p. 14); 5I-30 (p. 14); 5I-31 (p. 14); 5I-32 (p. 15); 5I-33 (pp. 17-23).

5J – Science, Man, Science and Technology (1972)

5J-1 (p. 4); 5J-2 (p. 4); 5J-2a (p. 4); 5J-2b (p. 4); 5J-3 (p. 5); 5J-4 (p. 6); 5J-5 (p. 6).

5K – Music (1972)

a (p. 3); 5K-1 (p. 3); 5K-2 (p. 4); 5K-3 (p. 4); 5K-4 (pp. 4-5); 5K-5 (p. 5); 5K-6 (p. 5); 5K-6a (p. 5); 5K-7 (p. 5); 5K-8 (p. 5).

5L – History (1973)

a (p. 3); 5L-1 (p. 4); 5L-2 (p. 4); 5L-3 (p. 4); 5L-4 (p. 4); 5L-4a (p. 5); 5L-5 (p. 6); 5L-6 (p. 6); 5L-7 (p. 6); 5L-8 (p. 6); 5L-8a (p. 8); 5L-8b (p. 8); 5L-8c (p. 8); 5L-9 (p. 8); 5L-10 (p. 7); 5L-11 (p. 7); 5L-12 (p. 9); 5L-13 (p. 10); 5L-14 (p. 10).

5M – Geography (1973)

5M-1 (p. 4); 5M-2 (p. 4); 5M-3 (p. 4); 5M-4 (p. 7); 5M-5 (p. 8); 5M-6 (p. 10); 5M-7 (p. 10); 5M-8 (p. 11).

5N – Environmental Science (1974)

5N-1 (p. 1); 5N-1a (p. 1); 5N-2 (p. 2); 5N-3 (p. 2); 5N-4 (p. 3); 5N-5 (p. 3); 5N-6 (p. 6); 5N-6a (p. 7); 5N-7 (p. 8).

5O – Family Studies (1974)

5O-1 (p. 1); 5O-2 (p. 1); 5O-2a (p. 1); 5O-3 (p. 1); 5O-4 (p. 1); 5O-5 (p. 1); 5O-6 (p. 2); 5O-7 (p. 2); 5O-8 (p. 3).

5P – Physical and Health Education (1973)

5P-1 (p. 1); 5P-2 (p. 1); 5P-3 (p. 1); 5P-4 (p. 1); 5P-5 (p. 2); 5P-6 (p. 2); 5P-7 (p. 2); 5P-8 (p. 2); 5P-9 (p. 2); 5P-10 (p. 3); 5P-11 (p. 6); 5P-12 (p. 6); 5P-13 (p. 6); 5P-14 (p. 7); 5P-15 (p. 8); 5P-16 (p. 8); 5P-17 (p. 17).

Period 6 Documents (1976-1983)

6A – Classical Studies (1976)

6A-1 (p. 1); 6A-2 (p. 1); 6A-3 (p. 1); 6A-4 (p. 1); 6A-5 (p. 1); 6A-6 (p. 2); 6A-7 (pp. 2-3); 6A-8 (p. 4); 6A-9 (p. 4); 6A-10 (p. 4); 6A-11 (-); 6A-12 (p. 5); 6A-13 (p. 6); 6A-14 (p. 7); 6A-15 (p. 7); 6A-16 (p. 7); 6A-17 (p. 7); 6A-18 (p. 7); 6A-19 (p. 7); 6A-20 (p. 8); 6A-21 (p. 8); 6A-22 (pp. 8-9); 6A-23 (p. 9); 6A-24 (p. 9).

6B – English (1977)

6B-1 (p. i); 6B-2 (p. i); 6B-3 (p. i); 6B-4 (p. i); 6B-5 (p. ii); 6B-6 (p. ii); 6B-7 (p. ii); 6B-8 (p. 1); 6B-9 (p. 2); 6B-10 (p. 2); 6B-11 (p. 3); 6B-12 (p. 4); 6B-13 (p. 5); 6B-14 (p. 6); 6B-15 (pp. 7-8); 6B-16 (pp. 9-13); 6B-17 (p. 13); 6B-18 (p. 14); 6B-19 (p. 15); 6B-20 (p. 16); 6B-21 (p. 17); 6B-22 (p. 17); 6B-23 (p. 18); 6B-24 (pp. 18-19); 6B-25 (p. 20); 6B-26 (p. 21); 6B-27 (pp. 26-27); 6B-28 (pp. 35-36); 6B-29 (pp. 37-38); 6B-30 (pp. 39-50); 6B-31 (pp. 51-52); 6B-32 (p. 53); 6B-33 (p. 54); 6B-34 (p. 67); 6B-35 (p. 68); 6B-36 (p. 83, pp. 95-96); 6B-37 (p. 97); 6B-38 (pp. 106-111).

6C – History (1977)

6C-1 (p. 3); 6C-2 (p. 3); 6C-3 (p. 3); 6C-4 (p. 3); 6C-5 (p. 3); 6C-6 (p. 4); 6C-7 (p. 4); 6C-8 (p. 5); 6C-9 (p. 5); 6C-10 (p. 5); 6C-11 (p. 5); 6C-12 (p. 5); 6C-13 (p. 6); 6C-14 (p. 7); 6C-15 (p. 7); 6C-16 (p. 7); 6C-17 (p. 7); 6C-18 (p. 8); 6C-19 (p. 8); 6C-20 (p. 9); 6C-21 (p. 10); 6C-22 (p. 11); 6C-23 (p. 14); 6C-24 (p. 14); 6C-25 (p. 14); 6C-26 (p. 15); 6C-27 (p. 15); 6C-28 (p. 15); 6C-29 (p. 15); 6C-30 (p. 15); 6C-31 (p. 16); 6C-32 (p. 16); 6C-33 (p. 16); 6C-34 (p. 16); 6C-35 (p. 17); 6C-36 (p. 18); 6C-37 (p. 18); 6C-38 (memo, p. 1); 6C-39 (p. 1); 6C-40 (p. 2); 6C-41 (p. 2).

6D – Geography (1977)

6D-1 (p. 1); 6D-2 (p. 1); 6D-3 (p.1); 6D-4 (p.2); 6D-5 (p. 2); 6D-6 (p. 2); 6D-7 (p. 3); 6D-8 (pp. 3-4); 6D-9 (p. 4); 6D-10 (p. 4); 6D-11 (p. 4); 6D-12 (p. 4); 6D-13 (p. 5); 6D-14 (p. 5); 6D-15 (p. 5); 6D-16 (p. 5); 6D-17 (p. 5); 6D-18 (p. 5); 6D-19 (p. 6); 6D-20 (p. 7); 6D-21 (p. 8); 6D-22 (pp. 8-13); 6D-23 (p. 14); 6D-24 (pp. 15-22); 6D-25 (p. 23); 6D-26 (p. 24); 6D-27 (p. 40); 6D-28 (p. 41); 6D-29 (p. 42); 6D-30 (p. 45); 6D-31 (pp. 46-47).

6E – Science (1978)

6E-1 (p. 1); 6E-2 (p. 4); 6E-3 (p. 4); 6E-4 (pp. 4-5); 6E-5 (pp. 5-6); 6E-6 (pp. 6-7);6E-7 (p. 7); 6E-8 (p. 8); 6E-9 (p. 10); 6E-10 (pp. 12-13); 6E-11 (p. 23); 6E-12 (pp. 23-24); 6E-13 (p. 24); 6E-14 (pp. 24-26); 6E-15 (p. 28); 6E-16 (p. 29); 6E-17 (p. 29); 6E-18 (pp. 29-30); 6E-19 (pp. 30-31); 6E-20 (pp. 32-33); 6E-21 (p. 34); 6E-22 (p. 34); 6E-23 (p. 35); 6E-24 (pp. 36-38); 6E-25 (p. 40); 6E-26 (pp. 42-44); 6E-27 (pp. 46-48); 6E-28 (p. 48); 6E-29 (pp. 48-49); 6E-30 (p. 56); 6E-31 (p. 57); 6E-32 (p. 58); 6E-33 (p. 59); 6E-34 (p. 72).

6F – Physical and Health Education (1978)

6F-1 (p. 1); 6F-2 (p. 1); 6F-3 (p. 1); 6F-4 (p. 2); 6F-5 (pp. 3-4); 6F-6 (p. 4); 6F-7 (pp. 4-5); 6F-8 (p. 5); 6F-9 (p. 5); 6F-10 (p. 5); 6F-11 (p. 6); 6F-12 (p. 6); 6F-13 (p. 6); 6F-14 (p. 7); 6F-15 (p. 7); 6F-16 (p. 8); 6F-17 (p. 9); 6F-18 (p. 9); 6F-19 (pp. 10-15); 6F-20 (p. 16); 6F-21 (pp. 17-18); 6F-22 (p. 20); 6F-23 (pp. 22-23); 6F-24 (p. 25); 6F-25 (p. 26); 6F-26 (p. 26); 6F-27 (pp. 30-33); 6F-28 (pp. 35-39); 6F-29 (pp. 39-40).

6G – Guidance (1978)

6G-1 (p. 1); 6G-2 (p. 1); 6G-3 (p. 1); 6G-4 (p. 1); 6G-5 (p. 3); 6G-6 (p. 4); 6G-7 (pp. 4-5); 6G-8 (pp. 5-8); 6G-9 (p. 8); 6G-10 (pp. 9-10); 6G-11 (p. 11); 6G-12 (p. 11); 6G-13 (p. 12); 6G-14 (p. 13); 6G-15 (pp. 13-18); 6G-16 (p. 19); 6G-17 (p. 20); 6G-18 (pp. 27-28); 6G-19 (pp. 30-31); 6G-20 (pp. 35-36).

6H – French (1980)

6H-1 (p. 1); 6H-2 (p. 2); 6H-3 (p. 2); 6H-4 (p. 2); 6H-5 (p. 3); 6H-6 (p. 3); 6H-7 (p. 3); 6H-8 (p. 3); 6H-9 (p. 3); 6H-10 (pp. 3-4); 6H-11 (pp. 4-17); 6H-12 (pp. 17-23); 6H-13 (p. 24); 6H-14 (p. 24); 6H-15 (p. 24); 6H-16 (pp. 24-25); 6H-17 (pp. 25-27); 6H-18 (p. 28); 6H-19 (pp. 29-30); 6H-20 (pp. 32-60); 6H-21 (pp. 62-63); 6H-22 (p. 65); 6H-23 (p. 66); 6H-24 (pp. 67); 6H-25 (pp. 70-72); 6H-26 (pp. 72-73); 6H-27 (p. 74).

6I – Dramatic Arts (1981)

6I-1 (p. 5); 6I-2 (p. 6); 6I-3 (p. 6); 6I-4 (p. 7); 6I-5 (pp. 7-8); 6I-6 (p. 8); 6I-7 (pp. 8-9); 6I-8 (p. 9); 6I-9 (pp. 10-11); 6I-10 (p. 11); 6I-11 (pp. 12); 6I-12 (p. 13); 6I-13 (p. 17); 6I-14 (p. 18); 6I-15 (p. 19); 6I-16 (p. 20); 6I-17 (p. 21); 6I-18 (p. 25).

6J – Computer Science (1983)

6J-1 (p. 2); 6J-2 (p. 3); 6J-3 (p. 3); 6J-4 (p. 4); 6J-5 (p. 5); 6J-6 (p. 6); 6J-7 (p. 7); 6J-8 (p. 9); 6J-9 (p. 9); 6J-10 (p. 10); 6J-11 (p. 11); 6J-12 (pp. 23-24).

6K – Language Across the Curriculum (1978)

6K-1 (p. 3); 6K-2 (p. 3); 6K-3 (p. 3); 6K-4 (p. 3); 6K-5 (pp. 3-4); 6K-6 (pp. 4-5); 6K-7 (p. 5); 6K-8 (p. 5); 6K-9 (p. 6); 6K-10 (p. 6); 6K-11 (p. 7); 6K-12 (p. 7); 6K-13 (p. 8); 6K-14 (p. 9); 6K-15 (p. 10); 6K-16 (p. 10); 6K-17 (p. 11); 6K-18 (p. 13); 6K-19 (p. 13); 6K-20 (p. 14); 6K-21 (p. 15); 6K-22 (p. 15); 6K-23 (p. 16); 6K-24 (p. 17); 6K-25 (memo, 1).

Period 7 Documents (1983-1992)

7A – Ontario Schools: Intermediate and Senior Divisions (1984)

7A-1 (p. 1); 7A-2 (p. 2); 7A-3 (p. 2); 7A-4 (p. 2); 7A-5 (p. 3); 7A-6 (p. 3); 7A-7 (p. 3); 7A-8 (p. 4); 7A-9 (p. 4); 7A-10 (p. 5); 7A-11 (p. 5); 7A-12 (p. 5); 7A-13 (p. 7); 7A-14 (p. 8); 7A-15 (p. 8); 7A-16 (pp. 8-9); 7A-17 (p. 9); 7A-18 (p. 9); 7A-19 (p. 9); 7A-20 (p. 10); 7A-21 (p. 11); 7A-22 (p. 11); 7A-23 (p. 11); 7A-24 (p. 11); 7A-25 (p. 12); 7A-26 (p. 12); 7A-27 (p. 12); 7A-28 (p. 12); 7A-29 (p. 12); 7A-30 (p. 12); 7A-31 (p. 12); 7A-32 (p. 12); 7A-33 (p. 12); 7A-34 (p. 12); 7A-35 (p. 12); 7A-36 (p. 12); 7A-37 (pp. 12-13); 7A-38 (p. 13); 7A-39 (p. 13); 7A-40 (p. 13); 7A-41 (p. 13); 7A-42 (p. 13); 7A-43 (p. 13).

7B – Basically Right: English (1984)

7B-1 (p. 3); 7B-2 (p. 3); 7B-3 (p. 3); 7B-4 (p. 4); 7B-5 (p. 4); 7B-6 (p. 5); 7B-7 (p. 5); 7B-8 (p. 5); 7B-9 (p. 6); 7B-10 (p. 7); 7B-11 (p. 8); 7B-12 (p. 9); 7B-13 (p. 10); 7B-14 (pp. 12-13); 7B-15 (p. 13); 7B-16 (p. 14); 7B-17 (p. 15); 7B-18 (p. 15); 7B-19 (p. 15); 7B-20 (p. 24); 7B-21 (pp. 24-27); 7B-22 (p. 27); 7B-23 (p. 34); 7B-24 (p. 40); 7B-25 (p. 41); 7B-26 (p. 42); 7B-27 (p. 50); 7B-28 (p. 53); 7B-29 (p. 57); 7B-30 (p. 57); 7B-31 (p. 57); 7B-32 (p. 57).

7C – Guidance (1985)

7C-1 (p. 2); 7C-2 (p. 4); 7C-3 (p. 5); 7C-4 (p. 6); 7C-5 (pp. 6-7); 7C-6 (p. 7); 7C-7 (p. 8); 7C-8 (p. 9); 7C-9 (p. 9); 7C-10 (p. 9); 7C-11 (p. 10); 7C-12 (p. 10); 7C-13 (p. 10); 7C-14 (p. 10); 7C-15 (p. 11); 7C-16 (p. 11); 7C-17 (p. 11); 7C-18 (p. 11); 7C-19 (p. 11); 7C-20 (p. 12); 7C-21 (p. 13); 7C-22 (p. 13); 7C-23 (p. 14); 7C-24 (p. 15); 7C-25 (p. 16); 7C-26 (p. 18); 7C-27 (p. 18).

7D – Mathematics (1985)

7D-1 (p. 5); 7D-2 (p. 6); 7D-3 (p. 7); 7D-4 (p. 12); 7D-5 (p. 12); 7D-6 (p. 12); 7D-7 (p. 13); 7D-8 (pp. 13-14); 7D-9 (p. 14); 7D-10 (pp. 15-16); 7D-11 (p. 16); 7D-12 (p. 17); 7D-13 (p. 18); 7D-14 (pp. 18-19); 7D-15 (p. 19); 7D-16 (p. 19); 7D-17 (p. 21); 7D-18 (p. 23); 7D-19 (p. 24); 7D-20 (p. 25); 7D-21 (p. 28); 7D-22 (p. 29); 7D-23 (pp. 30-33); 7D-24 (pp. 34-37).

7E – Technology Studies (1985)

7E-1 (p. 1); 7E-2 (p. 3); 7E-3 (p. 5); 7E-4 (p. 6); 7E-5 (p. 7); 7E-6 (pp. 7-8); 7E-7 (p. 8); 7E-8 (p. 8); 7E-9 (p. 8); 7E-10 (p. 8); 7E-11 (p. 8); 7E-12 (p. 8); 7E-13 (p. 9); 7E-14 (pp. 9-10); 7E-15 (p. 10); 7E-16 (p. 10); 7E-17 (p. 10); 7E-18 (p. 10); 7E-19 (p. 11); 7E-20 (p. 11); 7E-21 (pp. 11-12); 7E-22 (p. 12); 7E-23 (p. 12); 7E-24 (p. 12); 7E-25 (pp. 15-19); 7E-26 (p. 19); 7E-27 (p. 19); 7E-28 (p. 19); 7E-29 (p. 19); 7E-30 (p. 20); 7E-31 (p. 20); 7E-32 (p. 20); 7E-33 (p. 20); 7E-34 (p. 22); 7E-35 (p. 23); 7E-36 (p. 23); 7E-37 (p. 23); 7E-38 (p. 24); 7E-39 (pp. 24-25); 7E-40 (pp. 25-26).

7F – Business Studies (1986)

7F-1 (Part A - Policy, pp. 4-5); 7F-2 (p. 5); 7F-3 (p. 5); 7F-4 (p. 8); 7F-5 (p. 9); 7F-6 (p. 13); 7F-7 (p. 15); 7F-8 (p. 17); 7F-9 (pp. 17-20); 7F-10 (p. 20); 7F-11 (p. 20); 7F-12 (p. 20); 7F-13 (p. 21); 7F-14 (p. 21); 7F-15 (p. 22); 7F-16 (p. 22); 7F-17 (p. 23); 7F-18 (p. 23); 7F-19 (p. 24); 7F-20 (p. 25); 7F-21 (p. 28); 7F-22 (p. 28); 7F-23 (p. 28); 7F-24 (p. 28); 7F-25 (p. 29); 7F-26 (p. 29); 7F-27 (p. 30); 7F-28 (p. 30); 7F-29 (p. 31); 7F-30 (p. 31); 7F-31 (p. 31); 7F-32 (p. 31); 7F-33 (p. 32); 7F-34 (p. 32); 7F-35 (p. 32); 7F-36 (pp. 33-34); 7F-37 (p. 34); 7F-38 (p. 34); 7F-39 (p. 35); 7F-40 (p. 35); 7F-41 (p. 35); 7F-42 (p. 35); 7F-43 (p. 36); 7F-44 (p. 36); 7F-45 (p, 36); 7F-46 (p. 36); 7F-47 (p. 36); 7F-48 (Keyboarding, p. 4); 7F-49 (p. 4); 7F-50 (p. 5); 7F-51 (p. 5); 7F-52 (p. 5); 7F-53 (p. 6); 7F-54 (p. 6); 7F-55 (p. 7); 7F-56 (Marketing, pp. 6-11); 7F-57 (Integrated Business, p. 6); 7F-58 (pp. 6-9); 7F-59 (Basic Business, pp. 16-17); 7F-60 (Integrated Business, p. 72); 7F-61 (p. 73); 7F-62 (p. 73).

7G – History and Contemporary Studies (1986)

7G-1 (Part A, p. 5); 7G-2 (p. 5); 7G-3 (p. 5); 7G-4 (p. 6); 7G-5 (p. 6); 7G-6 (p. 6); 7G-7 (p. 6); 7G-8 (p. 7); 7G-9 (p. 7); 7G-10 (p. 8); 7G-11 (p. 8); 7G-12 (pp. 8-10); 7G-13 (p. 10); 7G-14 (p. 11); 7G-15 (p. 12); 7G-16 (p. 12); 7G-17 (p. 13); 7G-18 (pp. 13-14); 7G-19 (p. 16); 7G-20 (p. 17); 7G-21 (pp. 18-19); 7G-22 (p. 20); 7G-23 (p. 21); 7G-24 (p. 29); 7G-25 (pp. 29-30); 7G-26 (p. 30); 7G-27 (p. 31); 7G-28 (p. 31); 7G-29 (p. 31); 7G-30 (p. 32); 7G-31 (p. 33); 7G-32 (p. 33); 7G-33 (p. 42); 7G-34 (p. 43); 7G-35 (p. 43); 7G-36 (p. 43); 7G-37 (Part B, p. 14); 7G-38 (p. 14); 7G-39 (p. 15); 7G-40 (p. 15); 7G-41 (p. 16); 7G-42 (p. 17); 7G-43 (p. 18); 7G-44 (p. 19); 7G-45 (p. 20); 7G-46 (p. 20); 7G-47 (pp. 21-25).

7H – Visual Arts (1986)

7H-1 (p. 5); 7H-2 (p. 7); 7H-3 (p. 7); 7H-4 (p. 7); 7H-5 (p. 8); 7H-6 (pp. 11-14); 7H-7 (p. 15); 7H-8 (p. 16); 7H-9 (p. 17); 7H-10 (p. 18); 7H-11 (p. 19); 7H-12 (p. 19); 7H-13 (p. 19); 7H-14 (p. 20); 7H-15 (p. 26); 7H-16 (p. 30); 7H-17 (pp. 31-33); 7H-18 (p. 34); 7H-19 (p. 35); 7H-20 (p. 38); 7H-21 (p. 39); 7H-22 (p. 39); 7H-23 (p. 40); 7H-24 (p. 41); 7H-25 (p. 41); 7H-26 (pp. 59-60); 7H-27 (p. 62); 7H-28 (p. 63); 7H-29 (p. 63); 7H-30 (p. 64); 7H-31 (p. 64); 7H-32 (pp. 65-66); 7H-33 (p. 67); 7H-34 (p. 67); 7H-35 (p. 101); 7H-36 (p. 101); 7H-37 (p. 101); 7H-38 (p. 101); 7H-39 (p. 101); 7H-40 (p. 101); 7H-41 (p. 102); 7H-42 (p. 103); 7H-43 (p. 103); 7H-44 (p. 104); 7H-45 (p. 104); 7H-46 (p. 104); 7H-47 (p. 104); 7H-48 (p. 104); 7H-49 (p. 105); 7H-50(p. 106).

7I – Science (1987)

7I-1 (Part 1, p. 2); 7I-2 (p. 3); 7I-3 (p. 6); 7I-4 (p. 6); 7I-5 (p. 6); 7I-6 (p. 7); 7I-7 (pp. 7-10); 7I-8 (p. 10); 7I-9 (pp. 10-12); 7I-10 (pp. 12-13); 7I-11 (p. 13); 7I-12 (p. 13); 7I-13 (p. 14); 7I-14 (p. 14); 7I-15 (p. 15); 7I-16 (p. 17); 7I-17 (p. 18); 7I-18 (p. 18); 7I-19 (p. 19); 7I-20 (p. 20); 7I-21 (pp. 22-23); 7I-22 (p. 23); 7I-23 (pp. 23-24); 7I-24 (p. 24); 7I-25 (p. 24); 7I-26 (p. 25); 7I-27 (p. 26); 7I-28 (p. 30); 7I-29 (p. 30); 7I-30 (p. 31); 7I-31 (pp. 31-32); 7I-32 (p. 33); 7I-33 (pp. 34-35); 7I-34 (p. 36); 7I-35 (p. 37); 7I-36 (p. 38); 7I-37 (p. 39); 7I-38 (p. 51); 7I-39 (p. 52); 7I-40 (p. 56); 7I-41 (p. 56); 7I-42 (p. 56); 7I-43 (p. 56); 7I-44 (p. 56); 7I-45 (p. 56); 7I-46 (p. 56); 7I-47 (p. 57); 7I-48 (p. 57); 7I-49 (p. 58); 7I-50 (p. 58); 7I-51 (p. 58); 7I-52 (p. 59); 7I-53 (pp. 59-60); 7I-54 (p. 61); 7I-55 (p. 62); 7I-56 (pp. 64-65); 7I-57 (p. 65); 7I-58 (pp. 66-68); 7I-59 (p. 68); 7I-60 (p. 68); 7I-61 (p. 69); 7I-62 (p. 70); 7I-63 (p. 70); 7I-64 (p. 70); 7I-65 (Part 2, p. 5); 7I-66 (p. 5); 7I-67 (p. 5); 7I-68 (p. 6); 7I-69 (p. 7); 7I-70 (p. 8); 7I-71 (pp. 10-12); 7I-72 (p. 12); 7I-73 (p. 13); 7I-74 (p. 14); 7I-75 (p. 15); 7I-76 (p. 15); 7I-77 (p. 16); 7I-78 (p. 17); 7I-79 (p. 18); 7I-80 (p. 20); 7I-81 (pp. 25-26); 7I-82 (p. 26); 7I-83 (p. 26).

7J – Family Studies (1987)

7J-1 (p. 2); 7J-2 (p. 3); 7J-3 (p. 4); 7J-4 (p. 7); 7J-5 (p. 7); 7J-6 (p. 8); 7J-7 (p. 8); 7J-8 (p. 8); 7J-9 (p. 8); 7J-10 (pp. 5-6); 7J-11 (p. 8); 7J-12 (p. 8); 7J-13 (p. 7); 7J-14 (p. 7); 7J-15 (p. 7); 7J-16 (p. 9); 7J-17 (p. 7); 7J-18 (p. 9); 7J-19 (p. 10); 7J-20 (p. 10); 7J-21 (p. 10); 7J-22 (p. 11); 7J-23 (pp. 11-12); 7J-24 (p. 13); 7J-25 (p. 14); 7J-26 (p. 15); 7J-27 (p. 17); 7J-28 (p. 17); 7J-29 (p. 17); 7J-30 (p. 18); 7J-31 (p. 18); 7J-32 (p. 19); 7J-33 (p. 20); 7J-34 (p. 20); 7J-35 (p. 20); 7J-36 (p. 20); 7J-37 (p. 20); 7J-38 (p. 21);

7J-39 (p. 22); 7J-40 (p. 24); 7J-41 (p. 25); 7J-42 (p. 26); 7J-43 (p. 26); 7J-44 (p. 27); 7J-45 (pp. 28-29); 7J-46 (p. 32); 7J-47 (p. 33); 7J-48 (p. 34); 7J-49 (p. 34); 7J-50 (p. 35); 7J-51 (p. 36); 7J-52 (p. 37); 7J-53 (p. 38); 7J-54 (p. 39); 7J-55 (p. 40); 7J-56 (p. 41); 7J-57 (p. 42); 7J-58 (p. 43); 7J-59 (p. 44); 7J-60 (pp. 45-46).

7K – English (1987)

7K-1 (p. 2); 7K-2 (p. 2); 7K-3 (p. 2); 7K-4 (p. 2); 7K-5 (p. 2); 7K-6 (p. 2); 7J-7 (p. 2); 7K-8 (p. 2); 7K-9 (p. 2); 7K-10 (p. 3); 7K-11 (p. 4); 7K-12 (p. 4); 7K-13 (p. 5); 7K-14 (p. 5); 7K-15 (p. 5); 7K-16 (p. 6); 7K-17 (p. 6); 7K-18 (p. 6); 7K-19 (p. 6); 7K-20 (p. 6); 7K-21 (p. 6); 7K-22 (p. 7); 7K-23 (p. 7); 7K-24 (p. 7); 7K-25 (p. 8); 7K-26 (p. 9); 7K-27 (p. 9); 7K-28 (p. 10); 7K-29 (p. 11); 7K-30 (p. 11); 7K-31 (p. 12); 7K-32 (p. 13); 7K-33 (p. 13); 7K-34 (p. 13); 7K-35 (p. 14); 7K-36 (pp. 14-15); 7K-37 (p. 15); 7K-38 (p. 16); 7K-39 (p. 16); 7K-40 (p. 17); 7K-41 (p. 17); 7K-42 (p. 17); 7K-43 (p. 18); 7K-44 (p. 18); 7K-45 (p. 18); 7K-46 (p. 19); 7K-47 (p. 20); 7K-48 (p. 20); 7K-49 (p. 21); 7K-50 (p. 21); 7K-51 (p. 22); 7K-52 (p. 23); 7K-53 (p. 23); 7K-54 (p. 23); 7K-55 (p. 24); 7K-56 (p. 24); 7K-57 (p. 24); 7K-58 (p. 24); 7K-59 (p. 25); 7K-60 (p. 25); 7K-61 (p. 25); 7K-62 (p. 26); 7K-63 (p. 26); 7K-64 (p. 26); 7K-65 (p. 27); 7K-66 (p. 27); 7K-67 (p. 28); 7K-68 (p. 28); 7K-69 (p. 28); 7K-70 (p. 28); 7K-71 (p. 29); 7K-72 (p. 29); 7K-73 (pp. 29-30); 7K-74 (p. 30); 7K-75 (p. 31); 7K-76 (p. 32); 7K-77 (p. 33); 7K-78 (p. 33); 7K-79 (p. 33); 7K-80 (p. 33); 7K-81 (p. 33).

7L – Geography (1988)

7L-1 (Part A, p. 3); 7L-2 (p. 3); 7L-3 (p. 4); 7L-4 (p. 5); 7L-5 (p. 5); 7L-6 (p. 5); 7L-7 (p. 5); 7L-8 (p. 5); 7L-9 (p. 5); 7L-10 (p. 6); 7L-11 (p. 6); 7L-12 (p. 7); 7L-13 (pp. 8-9); 7L-14 (p. 9); 7L-15 (p. 10); 7L-16 (p. 11); 7L-17 (p. 12); 7L-18 (p. 13); 7L-19 (p. 13); 7L-20 (p. 13); 7L-21 (p. 13); 7L-22 (p. 13); 7L-23 (p. 13); 7L-24 (p. 16); 7L-25 (p. 16); 7L-26 (p. 16); 7L-27 (p. 16); 7L-28 (p. 17); 7L-29 (p. 17); 7L-30 (p. 18); 7L-31 (p. 18); 7L-32 (pp. 19-20); 7L-33 (p. 21); 7L-34 (p. 22); 7L-35 (p. 22); 7L-36 (p. 23); 7L-37 (pp. 23-24); 7L-38 (pp. 27-28); 7L-39 (p. 29); 7L-40 (p. 30); 7L-41 (p. 30); 7L-42 (p. 30); 7L-43 (p. 31); 7L-44 (p. 31); 7L-45 (p. 31); 7L-46 (p. 31); 7L-47 (p. 32); 7L-48 (p. 32); 7L-49 (pp. 32-33); 7L-50 (Part B, p. 1); 7L-51 (p. 2); 7L-52 (p. 3); 7L-53 (p. 10); 7L-54 (p. 10); 7L-55 (p. 10); 7L-56 (p. 10); 7L-57 (p. 10); 7L-58 (p. 10); 7L-59 (p. 10); 7L-60 (p. 11); 7L-61 (p. 11); 7L-62 (p. 11); 7L-63 (p. 11); 7L-64 (p. 11); 7L-65 (p. 11); 7L-66 (p. 11); 7L-67 (p. 11); 7L-68 (p. 12); 7L-69 (p. 12); 7L-70 (p. 12); 7L-71 (p. 12); 7L-72 (p. 13); 7L-73 (p. 14); 7L-74 (p. 15); 7L-75 (pp. 17-28); 7L-76 (p. 29); 7L-77 (pp. 38-54); 7L-78 (Part C, p. 1); 7L-79 (p. 1); 7L-80 (p. 1); 7L-81 (p. 2); 7L-82 (p. 2); 7L-83 (p. 3); 7L-84 (p. 5); 7L-85 (p. 5); 7L-86 (p. 5); 7L-87 (p. 5); 7L-88 (p. 5); 7L-89 (p. 6); 7L-90 (p. 6); 7L-91 (pp. 7-8); 7L-92 (p. 8); 7L-93 (p. 11); 7L-94 (p. 12); 7L-95 (p. 13); 7L-96 (p. 14); 7L-97 (pp. 16-17).

7M – Music (1990)

7M-1 (p. 2); 7M-2 (p. 3); 7M-3 (p. 3); 7M-4 (p. 4); 7M-5 (p. 4); 7M-6 (p. 4); 7M-7 (p. 5); 7M-8 (p. 6); 7M-9 (pp. 7-8); 7M-10 (p. 8); 7M-11 (p. 8); 7M-12 (p. 8); 7M-13 (p. 9); 7M-14 (p. 10); 7M-15 (p. 10); 7M-16 (p. 10); 7M-17 (p. 10); 7M-18 (p. 10); 7M-19 (p. 10); 7M-20 (p. 11); 7M-21 (p. 11); 7M-22 (p. 12); 7M-23 (pp. 12-13); 7M-24 (p. 13); 7M-25 (p. 13); 7M-26 (p. 13); 7M-27 (p. 14); 7M-28 (p. 15); 7M-29 (p. 16); 7M-30 (pp. 21-22); 7M-31 (p. 22); 7M-32 (p. 23); 7M-33 (p. 24); 7M-34 (pp. 24-25); 7M-35 (p. 25); 7M-36 (p. 25); 7M-37 (p. 26); 7M-38 (p. 27); 7M-39 (p. 28); 7M-40 (pp. 29-30); 7M-41 (pp. 30-31); 7M-42 (p. 31); 7M-43 (p. 31); 7M-44 (p. 32).

Period 8 Documents (1992-1995)

8A – Transition Years (1992)

8A-1 (p. 2); 8A-2 (p. 2); 8A-3 (p. 2); 8A-4 (p. 3); 8A-5 (p. 3); 8A-6 (p. 3); 8A-7 (p. 3); 8A-8 (p. 4); 8A-9 (p. 4); 8A-10 (p. 4).

8B – Towards an Integrated Curriculum (1993)

8B-1 (p. 1); 8B-2 (p. 1); 8B-3 (p. 1); 8B-4 (p. 1); 8B-5 (p. 2); 8B-6 (p. 2); 8B-7 (p. 2); 8B-8 (p. 2); 8B-9 (p. 2); 8B-10 (p. 3); 8B-11 (p. 3); 8B-12 (p. 3); 8B-13 (p. 3); 8B-14 (p. 4); 8B-15 (p. 4); 8B-16 (p. 4); 8B-17 (p. 4); 8B-18 (pp. 4-5); 8B-19 (p. 5); 8B-20 (p. 5).

8C – Education about Religion in Ontario in Public Elementary School (1994)

8C-1 (p. 3); 8C-2 (p. 11); 8C-3 (p. 11); 8C-4 (p. 12); 8C-5 (p. 13); 8C-6 (p. 14); 8C-7 (p. 15); 8C-8 (p. 15); 8C-9 (p. 16); 8C-10 (p. 17); 8C-11 (p. 17); 8C-12 (p. 17); 8C-13 (p. 17); 8C-14 (p. 18); 8C-15 (p. 18); 8C-16 (p. 18); 8C-17 (p. 19); 8C-18 (p. 19); 8C-19 (p. 21); 8C-20 (p. 21); 8C-21 (p. 21); 8C-22 (p. 22); 8C-23 (p. 22).

8D – The Common Curriculum (1995)

8D-1 (p. 1); 8D-2 (p. 1); 8D-3 (p. 1); 8D-4 (p. 1); 8D-5 (p. 2); 8D-6 (p. 3); 8D-7 (p. 3); 8D-8 (p. 3); 8D-9 (p. 3); 8D-10 (p. 3); 8D-11 (p. 4); 8D-12 (p. 4); 8D-13 (p. 4); 8D-14 (p. 4); 8D-15 (p. 5); 8D-16 (p. 6); 8D-17 (p. 6); 8D-18 (p. 6); 8D-19 (p. 6); 8D-20 (p. 7); 8D-21 (p. 7); 8D-22 (p. 8); 8D-23 (p. 8); 8D-24 (p. 8); 8D-25 (p. 8); 8D-26 (p. 9); 8D-27 (p. 9); 8D-28 (p. 9); 8D-29 (p. 9); 8D-30 (p. 10); 8D-31 (p. 10); 8D-32 (pp. 10-11); 8D-33 (p. 11); 8D-34 (p. 11); 8D-35 (p. 11); 8D-36 (p. 12); 8D-37 (p. 12); 8D-38 (p. 12); 8D-39 (p. 13); 8D-40 (p. 13); 8D-41 (p. 13); 8D-42 (p. 14); 8D-43 (p. 16); 8D-44 (p. 16); 8D-45 (p. 16); 8D-46 (p. 16); 8D-47 (p. 16); 8D-48 (pp. 16-17); 8D-49 (p. 17); 8D-50 (p. 17); 8D-51 (p. 17); 8D-52 (p. 17); 8D-53 (p. 18); 8D-54 (p. 18); 8D-55 (p. 19); 8D-56 (p. 19); 8D-57 (p. 19); 8D-58 (p. 19); 8D-59 (pp. 19-20); 8D-60 (p. 20); 8D-61 (p. 20); 8D-62 (p. 21); 8D-63 (p. 21); 8D-64 (p. 21); 8D-65 (p. 22); 8D-66 (p. 23); 8D-67 (p. 23); 8D-68 (p. 23); 8D-69 (p. 23); 8D-70 (p. 23); 8D-71 (p. 24); 8D-72 (p. 24); 8D-73 (p. 24); 8D-74 (p. 25); 8D-75 (p. 25); 8D-76 (p. 25); 8D-77 (p. 25); 8D-78 (p. 26); 8D-79 (pp. 26-27); 8D-80 (p. 27); 8D-81 (p. 27); 8D-82 (p. 28); 8D-83 (p. 28); 8D-84 (p. 29); 8D-85 (p. 29); 8D-86 (p. 29); 8D-87 (p. 30); 8D-88 (p. 30); 8D-89 (p. 30); 8D-90 (p. 30); 8D-91 (p. 30); 8D-92 (p. 30); 8D-93 (p. 30); 8D-94 (p. 30); 8D-95 (p. 31); 8D-96 (p. 31); 8D-97 (p. 31); 8D-98 (p. 31); 8D-99 (p. 31); 8D-100 (p. 32); 8D-101 (p. 32); 8D-102 (p. 33); 8D-103 (p. 33); 8D-104 (p. 33); 8D-105 (p. 33); 8D-106 (pp. 33-34); 8D-107 (p. 34); 8D-108 (p. 35); 8D-109 (pp. 35-36); 8D-110 (p. 36); 8D-111 (p. 36); 8D-112 (p. 36); 8D-113 (p. 37); 8D-114 (p. 37); 8D-115 (p. 37); 8D-116 (p. 37); 8D-117 (p. 38); 8D-118 (p. 38); 8D-119 (p. 38); 8D-120 (p. 38); 8D-121 (p. 39); 8D-122 (p. 39); 8D-123 (p. 39); 8D-124 (p. 40); 8D-125 (p. 40); 8D-126 (p. 40); 8D-127 (p. 40); 8D-128 (p. 41); 8D-129 (p. 41); 8D-130 (p. 41); 8D-131 (p. 41); 8D-132 (p. 41); 8D-133 (p. 41); 8D-134 (p. 41); 8D-135 (p. 41); 8D-136 (p. 42); 8D-137 (p. 42); 8D-138 (p. 42); 8D-139 (p. 43); 8D-140 (p. 43); 8D-141 (p. 43); 8D-142 (p. 44); 8D-143 (p. 44); 8D-144 (p. 44); 8D-145 (p. 45); 8D-146 (p. 45); 8D-147 (p. 45); 8D-148 (p. 45); 8D-149 (p. 45); 8D-150 (p. 45); 8D-151 (p. 46); 8D-152 (p. 46); 8D-153 (p. 46); 8D-154 (p. 46); 8D-155 (p. 47); 8D-156 (p. 47); 8D-157 (p. 47); 8D-158 (p. 47); 8D-159 (p. 47); 8D-160 (p. 47); 8D-161 (pp. 47-48); 8D-162 (p. 48); 8D-163 (p. 48); 8D-164 (p. 48); 8D-165 (p. 48); 8D-166 (p. 48); 8D-167 (pp. 48-50); 8D-168 (p. 50); 8D-169 (p. 50); 8D-170 (p. 50); 8D-171 (p. 50); 8D-172 (p. 50); 8D-173 (p. 50); 8D-174 (p. 50); 8D-175 (p. 50); 8D-176 (p. 51); 8D-177 (p. 51); 8D-178 (p. 51); 8D-179 (p. 51); 8D-180 (p. 51); 8D-181 (p. 51); 8D-182 (p. 51); 8D-183 (p. 52); 8D-184 (p. 52); 8D-185 (p. 52); 8D-186 (p. 52); 8D-187 (p. 52); 8D-188 (p. 52); 8D-189 (p. 53); 8D-190 (p. 53); 8D-191 (p. 54); 8D-192 (p. 54); 8D-193 (p. 54); 8D-194 (p. 54); 8D-195 (p. 55); 8D-196 (p. 55); 8D-197 (p. 55); 8D-198 (p. 55); 8D-199 (p. 55); 8D-200 (p. 56); 8D-201 (p. 56); 8D-202 (p. 56); 8D-203 (p. 56); 8D-204 (p. 56); 8D-205 (p. 57); 8D-206 (p. 57); 8D-207 (p. 57); 8D-208 (p. 57); 8D-209 (p. 58); 8D-210 (p. 58); 8D-211 (p. 58); 8D-212 (p. 58); 8D-213 (p. 58); 8D-214 (p. 58); 8D-215 (p. 59); 8D-216 (p. 59); 8D-217 (p. 59); 8D-218 (p. 59); 8D-219 (p. 60); 8D-220 (p. 60); 8D-221 (p. 60); 8D-222 (p. 60); 8D-223 (p. 60); 8D-224 (p. 60); 8D-225 (p. 61); 8D-226 (p. 61); 8D-227 (p. 61); 8D-228 (p. 61); 8D-229 (p. 62); 8D-230 (p. 62); 8D-231 (p. 62); 8D-232 (p. 62); 8D-233 (pp. 62-63); 8D-234 (p. 63); 8D-235 (p. 63); 8D-236 (p. 63); 8D-237 (p. 63); 8D-238 (p. 63); 8D-239 (p. 63); 8D-240 (p. 64); 8D-241 (p. 64); 8D-242 (p. 64); 8D-243 (p. 64); 8D-244 (p. 64); 8D-245 (p. 65); 8D-246 (p. 65); 8D-247 (p. 65); 8D-248 (p. 65); 8D-249 (p. 65); 8D-250 (p. 66); 8D-251 (p. 66); 8D-252 (p. 66); 8D-253 (p. 66); 8D-254 (p. 67); 8D-255 (p. 67); 8D-256 (p. 67); 8D-257 (p. 68); 8D-258 (p. 68); 8D-259 (p. 69); 8D-260 (p. 69); 8D-261 (p. 69); 8D-262 (p. 69); 8D-263 (p. 70); 8D-264 (p. 70); 8D-265 (p. 70); 8D-266 (p. 70); 8D-267 (pp. 70-71); 8D-268 (p. 71); 8D-269 (p. 71); 8D-270 (p. 71); 8D-271

(p. 71); 8D-272 (p. 71); 8D-273 (p. 71); 8D-274 (p. 71); 8D-275 (p. 72); 8D-276 (p. 72); 8D-277 (p. 72); 8D-278 (p. 72); 8D-279 (p. 73); 8D-280 (p. 73); 8D-281 (p. 73); 8D-282 (p. 73); 8D-283 (p. 74); 8D-284 (p. 74); 8D-285 (p. 74); 8D-286 (p. 75); 8D-287 (p. 75); 8D-288 (p. 75); 8D-289 (p. 75); 8D-290 (p. 75); 8D-291 (p. 75); 8D-292 (p. 76); 8D-293 (p. 76); 8D-294 (p. 76); 8D-295 (p. 76); 8D-296 (p. 76); 8D-297 (p. 77); 8D-298 (p. 77); 8D-299 (p. 77); 8D-300 (p. 77); 8D-301 (p. 77); 8D-302 (p. 77); 8D-303 (p. 78); 8D-304 (p. 79); 8D-305 (p. 79); 8D-306 (p. 79); 8D-307 (p. 79); 8D-308 (p. 80); 8D-309 (p. 80); 8D-310 (p. 80); 8D-311 (p. 81); 8D-312 (p. 81); 8D-313 (p. 81); 8D-314 (p. 81); 8D-315 (p. 82); 8D-316 (p. 82); 8D-317 (p. 82); 8D-318 (p. 82); 8D-319 (p. 82); 8D-320 (p. 82); 8D-321 (p. 83); 8D-322 (p. 83); 8D-323 (p. 83); 8D-324 (p. 83); 8D-325 (p. 83); 8D-326 (p. 84); 8D-327 (p. 84); 8D-328 (p. 85); 8D-329 (p. 85); 8D-330 (p. 85); 8D-331(p. 85); 8D-332 (p. 86); 8D-333 (p. 86); 8D-334 (p. 86); 8D-335 (p. 86); 8D-336 (p. 86); 8D-337 (p. 86); 8D-338 (p. 87); 8D-339 (p. 87); 8D-340 (p. 87); 8D-341 (p. 87); 8D-342 (p. 87); 8D-343 (p. 87); 8D-344 (p. 88); 8D-345 (p. 88); 8D-346 (p. 88); 8D-347 (p. 88); 8D-348 (p. 88); 8D-349 (p. 88); 8D-350 (p. 88); 8D-351 (p. 89); 8D-352 (p. 89); 8D-353 (p. 89); 8D-354 (p. 89); 8D-355 (p. 89); 8D-356 (p. 90); 8D-357 (p. 90); 8D-358 (p. 90); 8D-359 (p. 90); 8D-360 (p. 90); 8D-361 (p. 91); 8D-362 (p. 91); 8D-363 (p. 92); 8D-364 (p. 92); 8D-365 (p. 92); 8D-366 (p. 92); 8D-367 (p. 92); 8D-368 (p. 92); 8D-369 (p. 93); 8D-370 (p. 93); 8D-371 (p. 93); 8D-372 (p. 93); 8D-373 (p. 93); 8D-374 (p. 94); 8D-375 (p. 94); 8D-376 (p. 94); 8D-377 (p. 95); 8D-378 (p. 95); 8D-379 (p. 95); 8D-380 (p. 95); 8D-381 (p. 95); 8D-382 (p. 95); 8D-383 (p. 95); 8D-384 (p. 95); 8D-385 (p. 95); 8D-386 (p. 96); 8D-387 (p. 106).

Periods 9 Documents (1996-1999)

9A – Mathematics (1997)

9A-1 (p. 3); 9A-2 (p. 3); 9A-3 (p. 3); 9A-4 (p. 4); 9A-5 (p. 4); 9A-6 (p. 4); 9A-7 (p. 4); 9A-8 (p. 5); 9A-9 (p. 5); 9A-10 (p. 5); 9A-11 (p. 5); 9A-12 (p. 6); 9A-13 (p. 6); 9A-14 (p. 6); 9A-15 (p. 6); 9A-16 (p. 7); 9A-17 (p. 7); 9A-18 (p. 10); 9A-19 (p. 11); 9A-20 (p. 11); 9A-21 (pp. 24-25); 9A-22 (p. 27); 9A-23 (p. 28); 9A-24 (p. 40); 9A-25 (p. 42); 9A-26 (p. 42); 9A-27 (pp. 50-51); 9A-28 (p. 52); 9A-29 (p. 61); 9A-30 (p. 61); 9A-31 (p. 68); 9A-32 (p. 70); 9A-33 (p. 72); 9A-34 (p. 72); 9A-35 (p. 72); 9A-36 (p. 73); 9A-37 (p. 74); 9A-38 (p. 75); 9A-39 (pp. 77-84).

9B – Language (1997)

9B-1 (p. 5); 9B-2 (p. 5); 9B-3 (p. 5); 9B-4 (p. 6); 9B-5 (p. 6); 9B-6 (p. 6); 9B-7 (p. 6); 9B-8 (p. 7); 9B-9 (p. 7); 9B-10 (p. 7); 9B-11 (p. 10); 9B-12 (p. 10); 9B-13 (p. 11); 9B-14 (p. 12); 9B-15 (p. 12); 9B-16 (p. 23); 9B-17 (p. 27); 9B-18 (p. 27); 9B-19 (pp. 27-28); 9B-20 (p. 28); 9B-21 (p. 28); 9B-22 (p. 28); 9B-23 (p. 37); 9B-24 (p. 39); 9B-25 (p. 39); 9B-26 (p. 39); 9B-27 (p. 39); 9B-28 (p. 39); 9B-29 (p. 39); 9B-30 (p. 46); 9B-31 (p. 46); 9B-32 (p. 48); 9B-33 (p. 49); 9B-34 (p. 50); 9B-35 (p. 51); 9B-36 (p. 51); 9B-37 (p. 51).

9C – History and Geography (1998)

9C-1 (p. 2); 9C-2 (p. 2); 9C-3 (pp. 2-3); 9C-4 (p. 3); 9C-5 (p. 3); 9C-6 (p. 3); 9C-7 (pp. 3-4); 9C-8 (p. 4); 9C-9 (p. 4); 9C-10 (p. 4); 9C-11 (p. 4); 9C-12 (pp. 4-5); 9C-13 (p. 5); 9C-14 (p. 6); 9C-15 (p. 7); 9C-16 (p. 7); 9C-17 (p. 7); 9C-18 (p. 7); 9C-19 (p. 7); 9C-20 (p. 7); 9C-21 (p. 8); 9C-22 (p. 8); 9C-23 (p. 9); 9C-24 (p. 9); 9C-25 (p. 9); 9C-26 (p. 42); 9C-27 (p. 42); 9C-28 (p. 43); 9C-29 (pp. 43-44); 9C-30 (p. 44); 9C-31 (p. 45); 9C-32 (p. 46); 9C-33 (p. 47); 9C-34 (p. 47); 9C-35 (p. 48); 9C-36 (p. 49); 9C-37 (p. 49); 9C-38 (p. 51); 9C-39 (p. 51); 9C-40 (p. 51); 9C-41 (p. 53); 9C-42 (p. 54); 9C-43 (p. 55); 9C-44 (p. 55); 9C-45 (p. 56); 9C-46 (p. 56); 9C-47 (p. 56); 9C-48 (p. 57); 9C-49 (p. 58); 9C-50 (p. 58); 9C-51 (p. 59); 9C-52 (p. 60); 9C-53 (p. 60); 9C-54 (p. 62); 9C-55 (p. 62); 9C-56 (p. 63).

9D – Science and Technology (1998)

9D-1 (p. 3); 9D-2 (p. 3); 9D-3 (p. 3); 9D-4 (p. 3); 9D-5 (p. 4); 9D-6 (p. 4); 9D-7 (p. 5); 9D-8 (p. 5); 9D-9 (p. 6); 9D-10 (p. 6); 9D-11 (p. 7); 9D-12 (p. 8); 9D-13 (p. 9); 9D-14 (p. 10); 9D-15 (p. 10); 9D-16 (pp. 10-11); 9D-17 (p. 14); 9D-18 (p. 14); 9D-19 (p. 27); 9D-20 (p. 29); 9D-21 (p. 31); 9D-22 (p. 31); 9D-23 (p. 31); 9D-24 (p. 46); 9D-25 (p. 52); 9D-25 (p. 52); 9D-26 (p. 52); 9D-27 (p. 66); 9D-28 (p. 68); 9D-29 (p. 86); 9D-30 (p. 88); 9D-31 (p. 88).

9E – French as a Second Language (1998)

9E-1 (p. 2); 9E-2 (p. 2); 9E-3 (p. 2); 9E-4 (p. 2); 9E-5 (p. 2); 9E-6 (p. 3); 9E-7 (p. 3); 9E-8 (p. 3); 9E-9 (p. 4); 9E-10 (p. 4); 9E-11 (p. 4); 9E-12 (p. 4); 9E-13 (p. 8); 9E-14 (p. 8); 9E-15 (p. 8); 9E-16 (p. 9); 9E-17 (p. 9); 9E-18 (p. 11); 9E-19 (p. 20).

9F – Health and Physical Education (1998)

9F-1 (p. 2); 9F-2 (p. 2); 9F-3 (p. 2); 9F-4 (p. 2); 9F-5 (p. 3); 9F-6 (p. 3); 9F-7 (p. 4); 9F-8 (p. 4); 9F-9 (p. 4); 9F-10 (p. 4); 9F-11 (p. 5); 9F-12 (p. 6); 9F-13 (p. 7); 9F-14 (p. 7); 9F-15 (p. 10); 9F-16 (p. 10); 9F-17 (p. 10); 9F-18 (p. 20); 9F-19 (p. 21); 9F-20 (p. 30); 9F-21 (p. 30); 9F-22 (p. 30); 9F-23 (p. 30); 9F-24 (p. 38).

9G – The Arts (1998)

9G-1 (p. 2); 9G-2 (p. 2); 9G-3 (p. 2); 9G-4 (p. 3); 9G-5 (p. 3); 9G-6 (p. 4); 9G-7 (p. 5); 9G-8 (p. 5); 9G-9 (p. 5); 9G-10 (p. 5); 9G-11 (p. 6); 9G-12 (p. 10); 9G-13 (p. 10); 9G-14 (p. 11); 9G-15 (p. 24); 9G-16 (p. 25); 9G-17 (p. 27); 9G-18 (p. 28); 9G-19 (p. 28); 9G-20 (p. 28); 9G-21 (p. 43); 9G-22 (p. 46); 9G-23 (p. 46); 9G-24 (p. 46); 9G-25 (p. 46); 9G-26 (p. 54); 9G-27 (pp. 59-60); 9G-28 (p. 60).

9H – Excellence in Education (1997)

9H-1 (p. 1); 9H-2 (p. 1); 9H-3 (p. 2); 9H-4 (p. 2); 9H-5 (p. 3); 9H-6 (p. 3); 9H-7 (p. 5); 9H-8 (p. 6).

Appendix B

Operational Definitions - The Ministry Perspective

The Ministry profiles are separated into various levels to determine what the Ministry perceived as important and unimportant. These levels were decided by the following operational definitions. Please note that while the amount of repeated quotations devoted to the item may account for its importance, it will be juxtaposed with the emphasis and clarity given to each quotation. Because the length of documentation for each period varies greatly (from 100 pages to 1000), and because the expressions used in the English language changed greatly between 1938 and 1999, it was impossible to make a strictly quantitative comparison. Decisions upon importance were based, therefore, upon close textual analysis, emphasis, and the repetition of certain ideas within the document itself.

Profiles A, B, C, and D are broken into 4 Levels of priority - High, Medium, Low, and Negligible. These terms will be defined as follows:

High Priority: An element (e.g. in Profile A - Content, Academic Processes, Practical/Manual Skills, Social Skills, Individual Development, Underlying Principles) will be considered a high priority if a) the curriculum document(s) used in the profile explicitly state that the item is of great importance, and that the teaching of this element is a high priority; ***AND*** b) the element is mentioned repeatedly throughout the document in the form of examples, illustrations, or specifications; ***AND*** c) the element is mentioned in almost all subject areas if there is more than one document used in that profile.

Medium Priority: An element will be considered a medium priority if a) the curriculum document(s) used in the profile explicitly state that the item is of great importance, or that the teaching of this element is a high priority, but not backed up by any supporting evidence throughout; ***OR*** b) the element is mentioned repeatedly throughout the document in the form of examples, illustrations, or specifications; ***AND*** c) the element is mentioned in a few subject areas if there is more than one document used in that profile.

Low Priority: An element will be considered a low priority if a) the curriculum document(s) used in the profile describe the element in a vague sense, and this is not backed up by any supporting evidence throughout; ***OR*** b) the element is mentioned incidentally somewhere in the document as an example, illustration, or specification; ***AND*** c) the element is mentioned in only one or two isolated subject areas if there is more than one document used in that profile.

Negligible Priority: An element will be considered a negligible priority if the element is mentioned once incidentally throughout the curriculum documents, is described as unrelated to the document's motives or is not mentioned at all.

Profile E is broken into 4 Levels of Importance - Central, Localized, Incidental, and No Evidence. These terms will be used according to the following Operational Definitions:

Central Importance: An approach (nested, crossdisciplinary, fusion, thematic, etc...) will be considered of central importance if a) the curriculum document(s) used in the profile explicitly state that it is of great importance for education in general; ***AND*** b) repeatedly promote its use for all or almost all subject areas. It will be designated as ***BLACK*** with a white font.

Localized Importance: An approach will be considered of localized importance if a) One of the curriculum documents (or one localized section of a comprehensive guideline) explicitly states that it is of great importance for education in general; ***AND*** b) repeatedly promotes the its use in one or two subject areas. It will be designated as ***DARK GREY***.

Incidental Importance: An approach will be considered of incidental importance if a) One of the curriculum documents (or one localized section of a comprehensive guideline) vaguely or casually promotes its use; ***OR*** b) gives example of the approach in passing in one or two subject areas. It will be designated as ***LIGHT GREY***.

No Evidence: An approach will be considered to not exist through lack of evidence if a) no curriculum documents make any statement (explicit or implicit) about education practices that resembles the approach ***AND/OR*** b) no examples exist that relate to its use. It will be left as ***WHITE***.

Profile F is broken into 4 Levels of Awareness - High, Fair, Vague, and No Evidence. These terms will be used in according to the following Operational Definitions:

High Degree of Awareness: The Ministry will be considered to have a high degree of awareness of an implementation impediment (e.g. subject attachment, speedy implementation...) if a) the curriculum document(s) used in the profile explicitly recognizes that the impediment may be a problem in the implementation process and vigorously warns schools, etc to guard against the problem; ***AND*** b) the impediment is mentioned repeatedly throughout the document(s) in the form of examples, warnings, illustrations or clarifications.

Fair Degree of Awareness: The Ministry will be considered to have a fair degree of awareness of an implementation impediment if a) the curriculum document(s) used in the profile explicitly recognizes that the impediment may be a problem in the implementation process and warns schools, etc to guard against the problem; ***AND*** b) the impediment is mentioned once more in the document(s) in the form of an example, a warning, or a clarification.

Vague Evidence of Awareness: The Ministry will be considered to have a vague awareness of an implementation impediment if a) the curriculum document(s) used in the profile implicitly hints that the impediment may cause problems in the implementation process at the school level; ***AND*** b) the impediment is not mentioned again.

No Evidence of Awareness: The Ministry will be considered to have no awareness of an implementation impediment if a) the curriculum document(s) make no mention (explicitly or implicitly) of the impediment.

Profile G is broken into 4 Levels of Assistance - Actively Provides or Enlists, Actively Encourages, Passively Encourages, and No Evidence. These terms will be used in according to the following Operational Definitions:

Actively Provides or Enlists: The Ministry will be considered to actively provide or enlist assistance to the implementation process through certain aids (e.g. professional development, additional resources, etc...) if a) it explicitly states that it will be providing the mentioned services to the schools to aid the implementation process; ***AND*** b) the active aid is mentioned repeatedly throughout the document(s) in the form of concrete examples of this assistance); ***AND*** c) discusses the mandatory nature of these aids.

Actively Encourages: The Ministry will be considered to actively encourage the implementation process if a) it explicitly advocates the use of the aforementioned aids to benefit the implementation process; ***AND*** b) gives numerous and concrete suggestions as to the source of aid for the process (although the Ministry will not provide); ***AND*** c) discusses the mandatory nature of these aids.

Passively Encourages: The Ministry will be considered to passively encourage the implementation process if a) it implicitly or in impersonal and vague terms promotes the use of an aid; ***AND*** b) the impediment is not mentioned again or mentioned in continuing vague terms.

No Evidence of Encouragement: The Ministry will be considered be neutral if no evidence can be detected in the document(s) that promote or negate its effect.

Appendix C

Detailed Analysis and Figures Explaining Periods 1 to 9

Period 1 – 1938 to 1942 (The Bluebook Curriculum)

p. 491	Figure 1.1 - Elements Used During Integration (Dimension A)
p. 492-499	Analysis of the Importance of Elements (Dimension A) in Period 1 by Sub-dimension
p. 500	Figure 1.2 - Objectives of Integration (Dimension B)
p. 501	Figure 1.3 - Loci of Integration (Dimension C)
p. 502	Figure 1.4 – The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D)
p. 503	Figure 1.5 - The Integration Methods/Approaches Used (Dimension E)
p. 504	Figure 1.6 - Awareness of Implementation Impediments (Dimension F)
p. 505	Figure 1.7 - Factors for Assisting or Impeding Curriculum Integration Implementation (Dimension G)

Period 2 – 1942 to 1949 (The Wartime Bluebook Curriculum)

p. 506	Figure 2.1 - Elements Used During Integration (Dimension A)
p. 507-513	Analysis of the Importance of Elements (Dimension A) in Period 2 by Sub-dimension
p. 514	Figure 2.2 - Objectives of Integration (Dimension B)
p. 515	Figure 2.3 - Loci of Integration (Dimension C)
p. 516	Figure 2.4 – The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D)
p. 517	Figure 2.5 - The Integration Methods/Approaches Used (Dimension E)
p. 518	Figure 2.6 - Awareness of Implementation Impediments (Dimension F)
p. 519	Figure 2.7 - Factors for Assisting or Impeding Curriculum Integration Implementation (Dimension G)

Period 3 – 1949 to 1958 (Curriculum I:1)

p. 520	Figure 3.1 - Elements Used During Integration (Dimension A)
p. 521-527	Analysis of the Importance of Elements (Dimension A) in Period 3 by Sub-dimension
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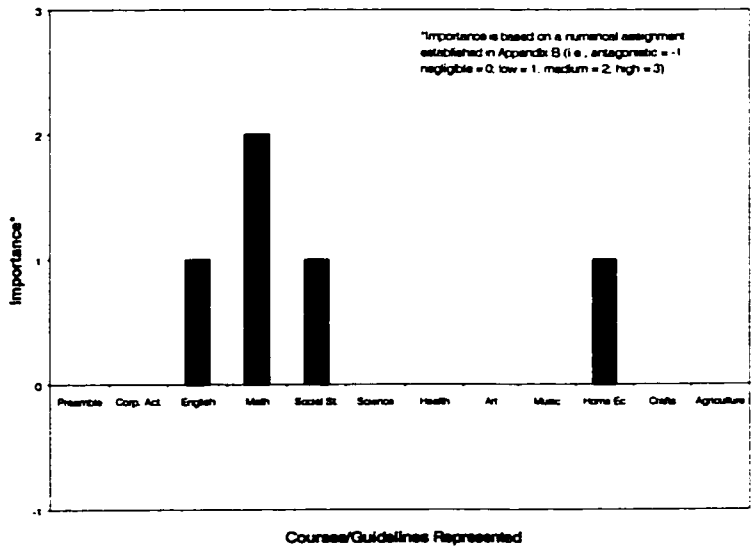
Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 1

Content

The integration of content was not a major priority during this period. The Programme, in fact, de-emphasized the use of content in general, arguing that "the number of ideas which is essential to grasp in the study of any subject is not large" (1A-10). It propounded that in past guidelines, content had come to be little more than "the dead wood of a formal tradition," (1A-4), and that this great bulk of prescribed, rote material had forced teachers to "'condescend upon particulars' to an extent which bewilders the mind that seeks to enlighten" (1A-10). The Science area was perhaps the most succinct: it bluntly stated that it was counterproductive to try to force children of twelve or thirteen to memorize scientific principles, as their minds are too immature to comprehend abstract ideas (1A-34). The Programme, therefore, advocated that overload of any sort must be guarded against (1A-38), and content brought in only incidentally rather than in formal lessons (see 1A-27, 1A-35, 1A-40), and then the teacher should make pains to "clothe factual material with interest and reality"(1A-23). While the preamble does instruct teachers to point out areas of content wherever they are apparent, such as in Math and Science, English and Geography, English and Math (1A-12, 1A-13), the integration of content is only really mentioned vaguely, however, and not realized in any concrete terms throughout the Programme. In Math, Art, Music, Crafts and Agriculture hardly any mention is made of content at all. The only subject that encourages the use of content to any extent is Social Studies, but does so with the hope that it will aid students' individual and social development.

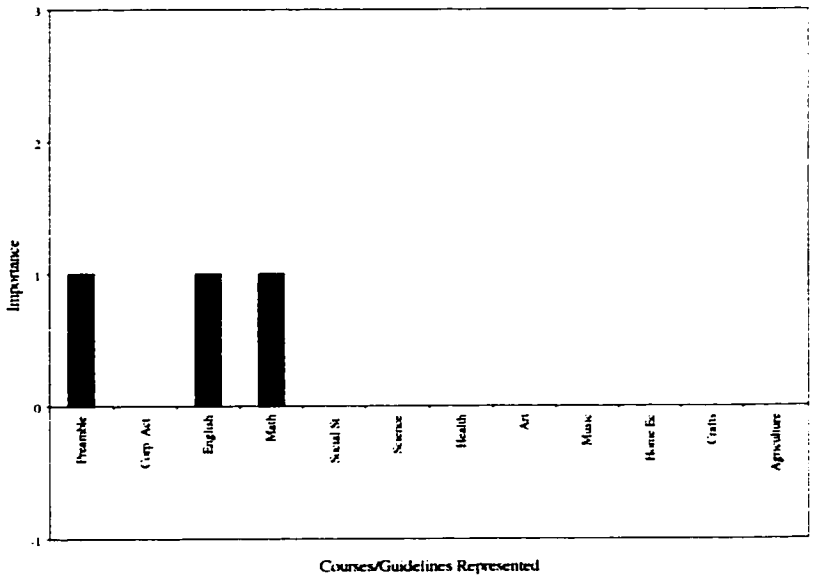
Figure 1.1.1 - The Importance of Content in Period 1



Academic Skills

As with Content, Academic Skills were also quite neglected throughout the Programme, and references to process-skill integration relegated to small disciplinary niches in a few subject areas. The few rudimentary skills mentioned as important facets of a complete education were: research skills, reading and writing, and math skills.[1] Academic learning was therefore severely curtailed, limited to the practical benefits it could provide. The Programme clearly noted the utilitarian aims of English: "It need scarcely be pointed out that the purpose is not to produce Shakespeares or Carlyles but merely to permit ordinary boys and girls to express their own ordinary ideas in correct and pleasing language" (1A-26). The same holds true for mathematical computation. The teacher is urged never to forget that the uses of arithmetic are for life outside school, not for future educational needs: "If the child is to share adequately in social life he must understand the fundamental ideas of number, must have reasonable speed and a high degree of accuracy in calculation, must be able to apply his knowledge of number to the purposes of his daily life, and must have so acquired these ideas that he will be prepared to apply them to the situations of adult life" (1A-29). Advanced skills appear to be shunned as unnecessary to everyday life and a frivolous use of class-time.

Figure 1.1.2 - The Importance of Academic Skills in Period 1



Isolated claims are made by the authors concerning the benefits of integration for this element of the curriculum. The document mentions that academic skills should be viewed as broadly applicable

[1] This lack of interest on the part of the Department may have been due to the knowledge that many students were not destined for higher education (and in many cases post-primary). The *Dominion Bureau of Statistics* (1944) indicated that in 1941 only 44.6% of the population had attended high school and only 8.8% had attended more than 12 years of schooling.

processes and not discrete subjects (see 1A-27 as an example). Research skills, otherwise known as the pupil's "ability to search for further information from satisfactory sources", should become at least as important as the information actually obtained (1A-9). This skill is, therefore, implicitly important in all subject areas. The Programme also instructs teachers that certain common areas should be accentuated:

> In mathematics and science, for example, calculation is often a common feature. If the teachers concerned adopt the same methods in the use of mathematical processes, much time is saved, and confusion in the mind of the pupil is avoided. In history and geography, again, a more extended, going beyond brief oral lessons, encourages work in written English (1A-12).

However, the integration of academic skills remains a vague notion with few concrete examples of the approach in action (1A-7, 1A-11, 1A-15). While the integration of English and Mathematics are promoted in their respective subjects (see 1A-13, 1A-30), no mention is made of these academic skills otherwise.

Manual/Practical Skills

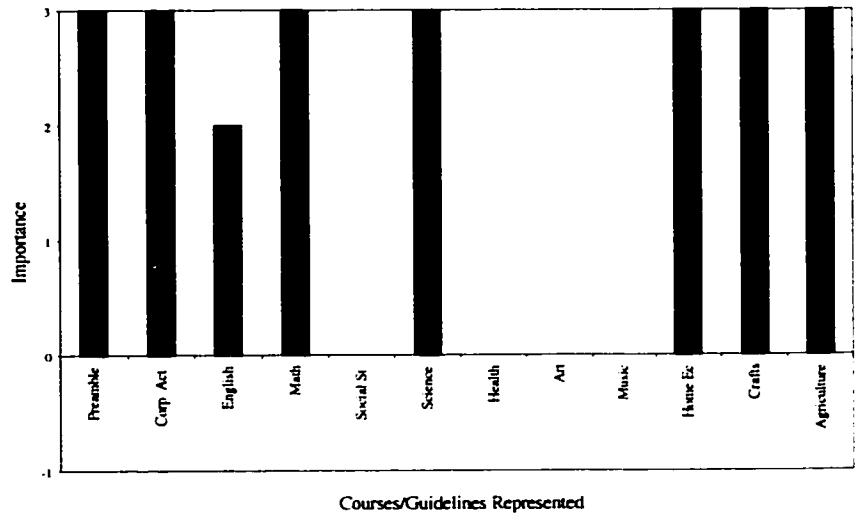
With Manual/Practical skills, the Programme finds the focal point of adolescent education. Hands-on experiences, discussions of "real-life" events, and practical problems imbue almost all aspects of the curriculum (except for the areas designated for aesthetic or personal development like Art or Music). The authors are fairly explicit in asserting that "a humane or liberal education is not one given through books alone, but one which brings children into contact with the larger interests of mankind; and the aim of post-primary schools should be to provide such an education by means of a curriculum containing large opportunities for practical work and related to living interests" (1A-14).

The curriculum advocates a two-fold purpose for the use of Practical/Manual Skills - "practical intelligence" (1A-5) and "practical work" (1A-15). With the firm belief that at the age of adolescence, students "learn by doing, not listening and verbalizing" (1A-60), the authors proposed the introduction of "practical intelligence", or projects that involved some active participation on the part of the student. This may include the building of models, the running of the school store or the cleaning of the school grounds (1A-29, 1A-51, 1A-66). Practical aspects of the curriculum are expected "to have some `carry over' into other fields of endeavour" (1A-51). Home Economics, for example, shows the practical applications of

Science and Health (1A-56). Agriculture shows scientific principles in a meaningful setting. Students were expected to "grasp concepts through practical work much more easily than by devoting long periods to the abstract study of ideas" (1A-15). Science gives agriculture a dignity of farming (1A-59) above a segregated, vocational course. Therefore, Agriculture is in fact recommended as a "core" subject, as it lends reality and purpose to other phases of schoolwork, particularly to science, crafts and home economics (1A-57).

The second goal, "practical work", is intended to have ramifications for each student's lifestyle and abilities. Utilitarian aspects are included in Mathematics (1A-29) such as budgeting, installment buying, and reading gas meters (1A-32), and in Science (1A-33) such as food preparation and garden experiments (1A-36). Another aspect is the use of manual skills for their own sake: "the attainment of a reasonable standard of practical skill is in itself an object of importance in a Modern School, particularly if it leads to mastery of one or more of the simple arts and crafts" (1A-15). It explains that due to the incorporation of machines in industry, it has freed people to pursue activities outside of work more and more. School should teach students how to make good practical use of leisure time. It should be mentioned, however, that this aspect stays fairly segregated to the less academic courses of Crafts (1A-52) and Agriculture (1A-58).

Figure 1.1.3 - The Importance of Manual Skills in Period 1



Social Skills

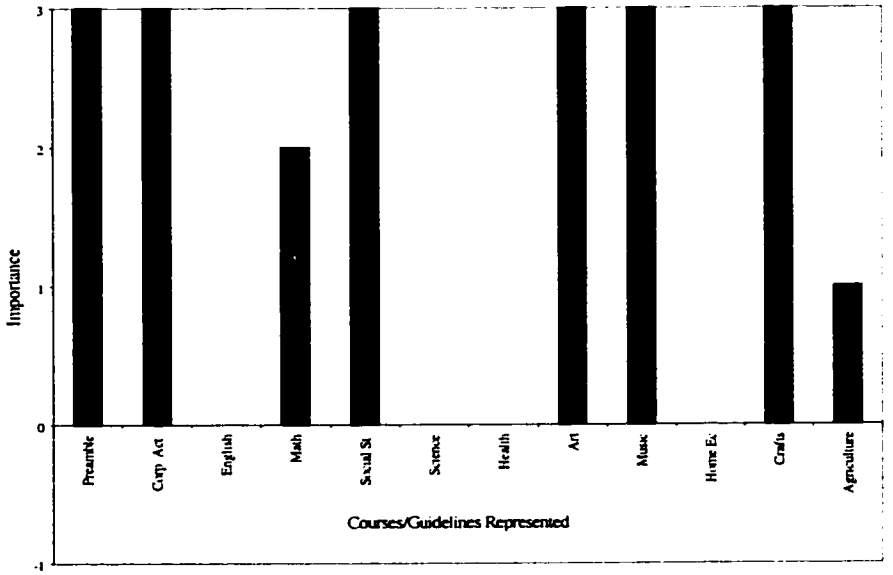
In the preamble, the authors proclaim the development of social skills in the student as one of the most important aims of education in general. For society to progress and for "national character" to be

strengthened, they decided to make the training of students in the rights and responsibilities of citizenship a top priority (1A-5). This was to be achieved in two ways: by dedicating certain courses to the study of social relations, and by encouraging student to take active part in cooperative activities.

While many subject areas note the social aspects of their particular field (for example Math, 1A-29), a new course, Social Studies was created with the prime responsibility of engendering in the students a genuine interest in social customs and the problems society currently faced. In doing so, it was hoped that the students would feel connected (1A-20, 1A-21). While this did give a boost to the study of contemporary society, rather than the more academic study of history that had previously been taught, it tended to centre the study of this element in one subject area (albeit a fused area). As the chart shows, other subjects such as English, Science and Health tended to ignore the social aspect, downloading it on Social Studies, leading to some segregation.

The other aspect of social skills was active participation. The authors note that "the most useful thing a child can learn at school is to get along with other people" (1A-61), and this is reinforced in almost each subject area. Thus, working in cooperative groupings is highly promoted throughout the curriculum. Music especially required "the utmost in co-operative effort ... towards the common good" (1A-43; see also Crafts 1A-49; Home Economics 1A-55). Group activities are also promoted in Agriculture insofar as they apply to work around the school and upkeep of the property (1A-58). A special section "Corporate Activities" is set aside in the Programme for the sole purpose of describing in detail the various roles the student should be expected to play in the school. This

Figure 1.1.4 - The Importance of Social Skills in Period 1

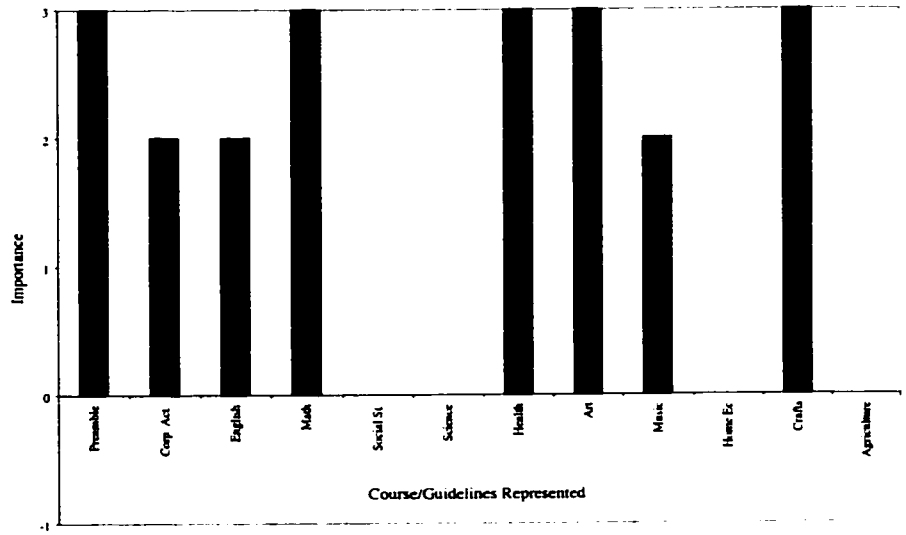


was set up to provide the opportunity for students to: get along (1A-61); develop team spirit (1A-62); develop social responsibility by helping with the maintenance of school discipline (1A-64); learn public speaking and conduct at assemblies (1A-65, 1A-67); organize various school associations and clubs (1A-66).

Individual Development

Individual development is evenly balanced with social skills in the 1938 Programme of Studies (1A-7). Specifically, the curriculum aims to develop the individual in three ways: by teaching the student how to be an independent, fully developed person, by encouraging them to follow their own interests, and by showing students how to preserve their mental health. References to the strengthening of character are mentioned primarily in the preamble (1A-5), the Mathematics and the Health sections. The matter is left fairly vague, however, with the use of only general descriptive terms, such as training students in initiative and self help (1A-51). For example, the authors assert that "the crux of the matter is not what a child of thirteen knows or can do in mathematics, but what sort of child he is becoming by virtue of his work in mathematics" (1A-29). While there is great insistence on the importance in helping the child develop independent thinking skills (1A-30) and mental endowment (1A-28), connections between various disciplines are left undeveloped.

Figure 1.1.5 - The Importance of Individual Development in Period 1



The second aspect bases itself on the belief that students are different and all possess special talents and differing interests. The Programme entreats that they "...should be encouraged to follow, within reasonable limits, any special bent which they may possess" (1A-11). The preferred medium of

self-expression, however, appears to congregate mostly around Art (1A-46, 1A-47) and hand crafts (1A-54), although creative writing is advocated for similar purposes (1A-26). These activities are taught as desirable hobbies as the students get older and that students will come to see them as "the ornaments of hours of leisure in maturer years" (1A-5), allowing them to develop a sense of self-expression and enjoy their leisure time (1A-16).

Lastly, certain skills should be taught as a means of allaying poor mental or moral health (see 1A-39, 1A-41). Music, for instance, was considered both "an artistic vehicle of expression, and [students] will find in it a satisfying outlet for the emotional stresses of early adolescence" (1A-42). Health has the primary aim of cultivating an active interest by the students in their own personal well-being, physically and mentally (1A-37). Therefore, individual development is a major consideration in the new curriculum, but evinces only incidental integration of most disciplines. The one notable exception is hand-crafts: this activity is encouraged as a supplement to almost every other subject as a means of facilitating and advancing all three aspects of personal growth (1A-26; 1A-36; 1A-45; 1A-48; 1A-51).

Underlying Principles

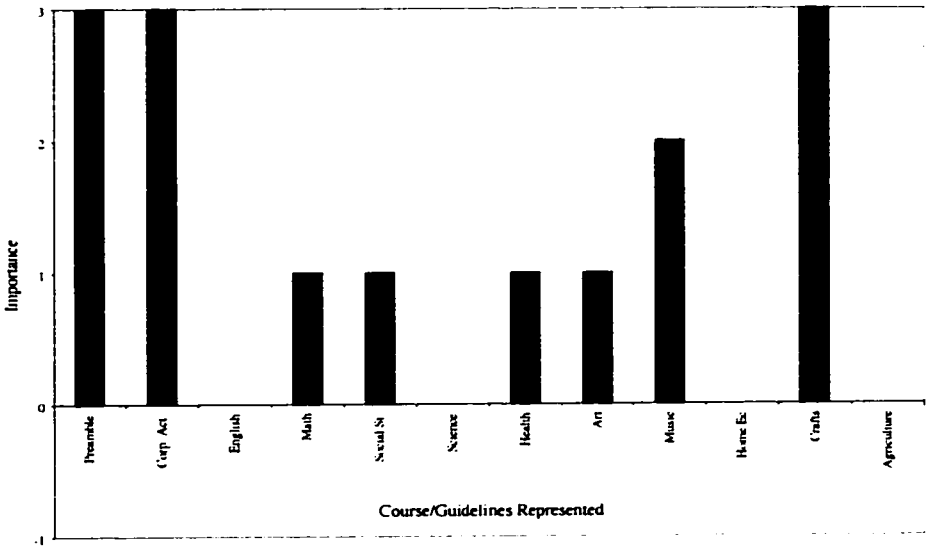
While not thoroughly developed throughout each subject area, the primary philosophy that underlies the curriculum is clearly stated in the preamble: The 1938 Programme intends to combat overspecialization and purely utilitarian educational goals. It promotes the philosophy of Social Individualism in which social and individual needs must be evenly balanced. "Industrialism... demands, only too often, a narrow specialisation of faculty; it produces only too readily, a patterned uniformity of work and behaviour; and it may, unless it is corrected, infect the minds of men with the genius of its own life. Education can correct industrialism..." (1A-6; see also 1A-5; 1A7). Through this, the Programme hopes to improve both the lives and interests of individuals as well as advance society and even industry with a new generation that is active, interested, open to new ideas, and highly motivated.

This principle imbues the entire curriculum but gains special attention in the mandatory co-curricular Corporate Activities. These "...provide not only a valuable training in co-operation but as a useful discipline in the shouldering of responsibilities" (1A-62). Both the individual and society's

interests are equally represented in the intended outcomes of sportsmanship, courtesy, initiative, cooperation, resourcefulness, and sense of responsibility, self-reliance and self-control (1A-62- 1A-67).

In certain areas of the programme, the authors go beyond the simple spirit of cooperation on the part of the student, saying that the individual, at times should bend before things considered greater than himself: At times it is necessary that "pupils realize the satisfaction born of willing service and even sacrifice in the devotion to a cause. This is the very essence of loyalty, and many students to whom the *word* loyalty is almost meaningless do in connection with this type of school activity experience the *reality*" (1A-63).

Figure 1.1.6 - The Importance of Underlying Principles in Period 1



Music is perhaps the most vehement in its demands of obligation. It states that "the success of a whole choir or orchestra depends upon "each man this day doing his duty," and his d uty is not to assert his individuality but to submerge his private interests in a combined effort towards the common good" (1A-43)

Other principles are mentioned incidentally. The teaching of religious knowledge, for example, is mentioned in one paragraph in the preamble, wherein principals and teachers are entreated to integrate it into their regular classes (1A-17). However, no specified times, content or teaching methods are mentioned, leaving the issue rather vague. Similarly, patriotism to Canada and the Commonwealth are integrated into the Social Studies course, but are done so almost accidentally (1A-19, 1A-25) Brief mention is also mentioned in health about developing "Moral Health" - clean thoughts, words, deeds, high ideals, and wholesome companions (1A-41).

	To promote the unity of the Curriculum (Subject Centred)	To promote a child-centred curriculum	To promote social continuity	To promote a political change
High Priority (3)		The curriculum should recognize the differing interests of students, and in doing so seek to relate knowledge to the student's familiar situation. Students will best learn when they are interested. (1A-4; 1A-4a; 1A-7; 1A-8; 1A-11; 1A-13; 1A-14; 1A-15; 1A-23; 1A-24; 1A-29; 1A-31; 1A-33; 1A-34; 1A-35; 1A-37; 1A-45; 1A-46; 1A-49; 1A-53; 1A-54; 1A-56; 1A-60) The curriculum should try to encourage pupils to develop an inquiring attitude and involvement in their own education. (1A-4; 1A-9; 1A-11; 1A-20; 1A-28; 1A-29; 1A-30; 1A-31; 1A-33; 1A-35; 1A-37; 1A-45; 1A-49; 1A-54) Work must be in accordance with students' capacities and abilities. (1A-10; 1A-11; 1A-15; 1A-24; 1A-34; 1A-38; 1A-46; 1A-53)		
Medium Priority (2)			The student must be educated in a way that reinforces the "claims and needs of the society in which every individual citizen must live." (1A-7; 1A-14; 1A-19; 1A-20; 1A-21; 1A-25; 1A-26; 1A-52; 1A-56) Through curriculum integration, society will receive a better, more skilled workforce and citizenry, thereby strengthening the character of the nation. (1A-5; 1A-16; 1A-29; 1A-30; 1A-32; 1A-41; 1A-43; 1A-58; 1A-61; 1A-62; 1A-63; 1A-65; 1A-67)	This curriculum promotes a political change against "the dead wood of a formal tradition," and "an attachment to conventional orthodoxies" (1A-4; 1A-6). Rather, it advocates a new national character through a "humane or liberal education" that will try to balance the individual and society. (1A-5; 1A-6; 1A-7; 1A-14; 1A-63; 1A-64) Leisure and enjoyment should be as cherished as work and "drudgery" (1A-5; 1A-16; 1A-26)
Low Priority (1)	Recognition that common ground exists between many subjects. This should be exploited to reduce overlap, timetable complexity, and increase efficiency. (1A-12; 1A-13; 1A-18; 1A-40) To encourage comprehensiveness and due study to all areas of the subject (1A-12; 1A-13; 1A-34) Objective is also to avoid "*confusion in the mind of the pupil*" (1A-12; 1A-13; 1A-18; 1A-27; 1A-35; 1A-51; 1A-57)			
0				

Figure 1.2 - Objectives of Integration (Dimension B) in Period 1

	Ministry	Board	School	Classroom
High Priority (3)	Programme created by the Department with help from outside experts in Canada and U.K. (1A-1; 1A-2; 1A-3) The Department directed the innovation, presented a sharp 1-year time limit for its implementation, and monitored progress through its inspectors. (1A-1) Although the innovation would have to be applied by individual teachers, the programme gives strict limitations for methods: ▪ Some formal components must be integrated due to Departmental mandate (i.e. English, Mathematics, Social Studies). (1A-13; 1A-27; 1A-34; 1A-39; 1A-40; 1A-45; 1A-61; 1A-62) ▪ Other areas must be integrated into the curriculum but are left up to the discretion of the teacher as to how to perform this exactly (i.e. Health, Art, Corporate activities). (1A-37-1A-40; 1A-44; 1A-45; 1A-56; 1A-66) ▪ For the rest, integration is highly recommended by the Department who rely on normative references to encourage participation (i.e. - "the wise teacher knows the usefulness of this approach"). (1A-12, 1A-13, 1A-17; 1A-29; 1A-33; 1A-35; 1A-45; 1A-51; 1A-64) ▪ Lastly, the Department simply makes suggestions that the teacher may accept or reject. (1A-9; 1A-10; 1A-44; 1A-55)			
Medium Priority (2)				Mention is made that a committee of teachers was included in the drafting of the Programme. (1A-1) Implicit throughout the document is the assumption that teachers should be the primary implementers of the innovations. As the primary implementers, teachers should be left to decide and plan how the particulars of subject unification and the integration of practical work will be actualized. (1A-6; 1A-13; 1A-17; 1A-34; 1A-40)
Low (1)			Only a brief mention of school-wide activities can be found in the teaching of religion (1A-17) and in the utilization of Corporate Activities (1A-6; 1A-64; 1A-65; 1A-66)	
0		No mention		

Figure 1.3 - Loci of Integration (Dimension C) in Period 1

	Completely Horizontal (integration among subjects but separated by Grades 7 & 8)	**Downwardly Vertical (Grades 7 & 8 linked to the Elementary system)**	**Upwardly Vertical (Grade 7 & 8 linked to the Secondary System)**	**Completely Vertical (Grade 7 & 8 seen as part of complete education with no breaks)**	**Insular vertical (Grade 7 & 8 linked but seen as a separate entity from elementary & Secondary)**
High Priority (3)					Notes that an adolescent's aptitude at this stage (age 11 or 12) is different from younger or older children. They have a greater interest for things practical. (1A-4a; 1A-8; 1A-26; 1A-33; 1A-42, 1A-43) The programme proposes that:: "all children should be transferred at the age of 11 or 12, from the junior or primary school either to schools of the type now called secondary, or to schools of the type which is now called central, *or to senior and separate departments of existing elementary schools.* Transplanted to new ground, and set in a new environment..." (1A-4a)
Medium (2)		The 1938 Programme was an amendment to the 1937, grade 1-6 Programme. As such, both follow a similar form and spirit. New social studies shows continuity from grade 4 to grade 8 with increasing detail and range (e.g. 1A-19; 1A-37)			
Low (1)	Except for the separation of content and projects, no large distinction is made between 7 & 8. Only exception is the divergent areas of study in the Grades 7 and 8 Social Studies section (1A-19)		Short reference to the fact that 11 and 12 year olds may be entering secondary system (1A-4a)		
0				No mention of preparing students for further education	

Figure 1.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 1

High Degree (3)	Warns teachers against too much emphasis on "particulars" (1A-10; 1A-35; 1A-40; 1A-54) Some teachers may spend too much time on 1 aspect. They must become more adaptable. (1A-12; 1A-13; 1A-34; 1A-40; 1A-54) Teachers must avoid seeing themselves as the font of all knowledge. (1A-9; 1A-21; 1A-35; 1A-62)					Specialized subsections of subject areas removed to encourage a more generalist approach. (1A-13; 1A-17; 1A-27; 1A-45) The order of work listed is not mandated. Teachers have some freedom as to order in which they must be taught. (1A-35; 1A-40)	The Department abolishes external exams Although, little mention is made of formal exams, the Programme does spell out alternative methods. (1A-22; 1A-23; 1A-35; 1A-46)			
Fair Degree (2)			Formal integration of subject matter will reduce overcrowding of the time table and relieve teachers' burden (1A-12; 1A-13) Rather than mandated, some topics (i.e. in Health) can be left out or kept until the opportunity arises (1A-34; 1A-40) Warns teachers not to overload the students with work or play (1A-38)							
Vague Evidence (1)		Acknowledges that productive student participation will take time to master. (1A-64)							Left vague. Home seen as an important influence on education, but pin-pointed especially in corporate activities (1A-6; 1A-67) Religious differences accepted (1A-17)	Allows for some exceptions (1A-18)
No Evidence (0)		Expects this Programme to be adopted by all schools within the year (1A-1)	While it greatly broadens the teachers' job descriptions, the department ignores the effect it may have on them.	No mention	Except for vague comments (i.e. that traditional teachers are "dead wood", no other mention is made			No mention		Ignores the new equipment required for new courses (1A-51-56)

Figure 1.6 - Awareness of Implementation Impediments (Dimension F) in Period 1

	Content	Academic Processes	Practical/ Manual Skills	Social Skills	Individual Development	Underlying Principles
High Priority (3)				Be good citizens - abide by decision of the majority (2A-3, 2A-4, 2A-12) Social interaction is necessary (2A-5, 2A-6). Peace through cooperation (2A-3, 2A-4, 2A-48, 2A-51, 2A-83, 2A-89, 2A-104) Be socially acceptable (2A-4, 2A-8, 2A-10, 2A-13, 2A-49, 2A-14) Must learn rights and responsibilities (2A-9, 2A-62, 2A-76, 2A-45, 2A-47, 2A-51, 2A-52, 2A-101, 2B-6, 2B-11, 2B-12) The "Enterprise method", corporate activities and courses in socialization (see 2A-14, 2A-20, 2A-21, 2A-23, 2A-24, 2A-26, 2A-28, 2A-30, 2A-35, 2A-37, 2A-39, 2A-42, 2A-44a,b,c,d,e,f,g).		Education in social democracy is based on the Christian ideal. (2A-3, 2A-4, 2A-5, 2A-11, 2A-12, 2A-13) Christian truths as a path to peace, morals/ethics (see 2A-3, 2A-11 and entire 2B section) "Enterprise" as curative for social & formalistic ills (2A-22, 2A-23, 2A-24, 2A-28) Respect for civic responsibility (2A-4, 2A-10, 2A-24, 2A-44, 2A-56, 2A-83) "Motherland" & Commonwealth, the bulwark of democracy (2A-48, 2A-52, 2A-68, 2A-69)
Medium Priority (2)			"Real Life" situations prepare students for adulthood (2A-55, 2A-58, 2A-59, 2A-60, 2A-61, 2A-64, 2A-68, 2A-69, 2A-92, 2A-101) and inspire higher study (2A-15, 2A-22, 2A-23, 2A-25, 2A-26, 2A-36, 2A-44f, 2A-70, 2A-75; 2A-91, 2A-92, 2A-93, 2A-95, 2A-97, 2A-102, 2A-104, 2A-105, 2B-17, 2B-19, 2B-21, 2B-35) Not all children are academically inclined - society will benefit from diversity (2A-7, 2A-8, 2A-14) Combine manual skills for a well-rounded education (2A-17, 2A-96, 2A-98, 2A-99). Not agriculture, through (2A-106, 2A-107)			
Low Priority (1)	Learning of content in itself is sterile (2B-9). It must be channelled into goal or problem-oriented activities (2A-23, 2A-25, 2A-35, 2A-37, 2A-39, 2A-50, 2A-106, 2A-107). It should be socially driven (2A-9, 2A-12, 2A-13, 2A-24, 2A-45, 2A-47, 2A-61) or a spring-board to higher, religious ideals (2B-8, 2B-13, 2B-31, 2B-32) Broad subject areas are a better way to contain content (2A-71, 2A-95), avoid overlap (2A-17, 2A-70, 2A-78, 2A-79), reinforce meaning (2A-73, 2A-74a, 2A-84, 2A-101, 2A-102)	Uniformity of skills should be downplayed and more variety offered (2A-7, 2A-8, 2A-57). Only a few "fundamental" skills are needed by society (2A-8, 2A-14, 2A-23, 2A-29, 2A-55, 2A-56, 2A-59, 2A-61, 2A-62, 2A-66). Skills can be aided by the enterprise (2A-23, 2A-24) but cannot replace formal disciplinary training (2A-29) Skills for understanding beauty of the text, for higher religious purpose (2B-15) and vice versa (2B-17)			"socially satisfactory personality" with individual talents & socially approved ideals promoted (2A-4, 2A-6, 2A-7, 2A-8, 2A-10, 2A-85, 2A-87, 2B-10, 2B-32, 2B-26). Character development (2A-4, 2A-28, 2A-34, 2A-38, 2A-45, 2A-61, 2A-62, 2A-76) 2A-80, 2A-91, 2A-98) Mentally healthy students (2A-39, 2A-57, 2A-77) Aesthetic development (2A-83)	
0						

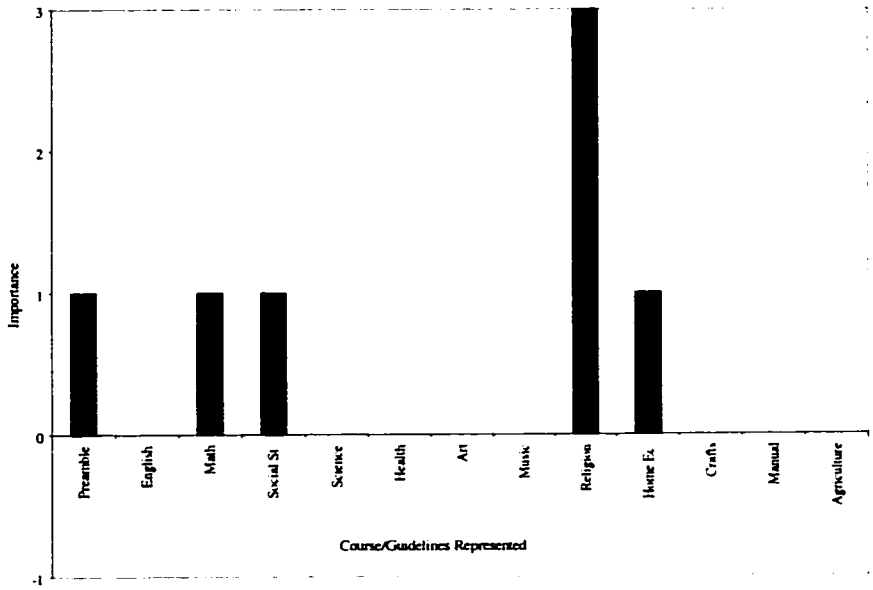
Figure 2.1 – Elements Used During Integration (Dimension A) in Period 2

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 2

Content

Like the original Programme, the 1942 document is punctuated by repeated warnings to the teacher that the accumulation of factual knowledge must be regarded as secondary in importance to the process of gaining experience in social living, confidence, and so on (see 2A-12, 2A-13, 2A-24, 2A-37, 2A-50, 2A-61, 2A-106, 2A-107). Rather than disparaging this element outright, however, the Department endeavours to find some solutions as to its proper use. Namely, it advocates the subjugation of facts and dates to help solve specific Enterprise-related problems (2A-9, 2A-39, 2A-45, 2A-47, 2A-61). Students will make use of only the content they need to further the project, ther eby placing the bits of information in perspective and making the experience meaningful for them (2A-23, 2A-25, 2A-35, 2A-73, 2A-74a, 2A-84, 2A-101, 2A-102).

Figure 2.1.1 - The Importance of Content in Period 2

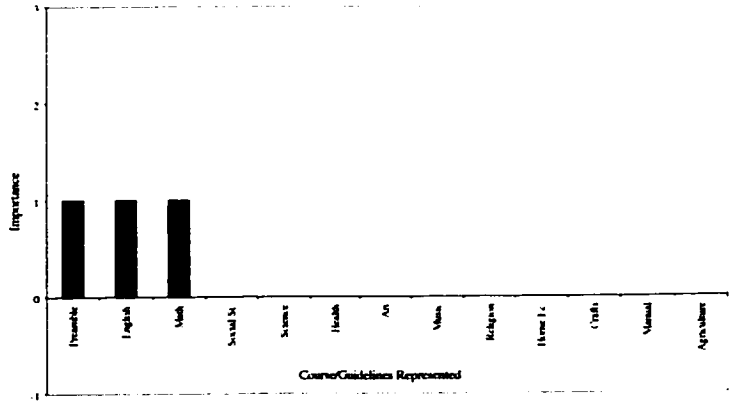


The one subject area that seems oddly out of touch with the others is the newly created Religious instruction. Although the dangers of "Memory Work" are mentioned,[1] this method does form a large basis for the course, alongside the detailed study of biblical texts (2B-8, 2B-9, 2B-13, 2B-31). The reasoning behind this decision is that content is the primary springboard to higher, religious ideals (2B-8, 2B-13, 2B-31, 2B-32).

Academic Skills

As in the previous period, this programme points out that not all children will have the same aptitude for certain academic skills. It goes further, however, by explicitly stating that not everyone has an academic bent and s/he should not be forced into that mould – rather, a variety of skills (academic, manual, etc...) should be seen as aiding the community and the nation (2A-7, 2A-8, 2A-57). Like in the previous period, only a few "fundamental" skills should be promoted: research, reading, writing, and math skills (2A-29, 2A-55, 2A-56). The authors are succinct and pragmatic as to these choices: The only skills that should be taught are those that allow the students entrance into the workforce or that will benefit society (2A-8, 2A-14, 2A-23, 2A-59, 2A-61, 2A-62, 2A-66). Post-secondary education was still not considered a viable option for the majority.

Figure 2.1.2 - The Importance of Academic Skills in Period 2



The Enterprise, again, is considered an ideal way to teach these ubiquitous skills to students. The authors surmise that students will focus on the project at hand and not notice the amount of time spent on developing particular skills, thereby maintaining their interest (2A-23, 2A-24, 2A-37). A desire to learn more on the part of the students would be considered a good indication of their mastery of a skill (2A-45). However, the authors are quick to point out the Enterprise should be seen as an enhancement, not a replacement to disciplinary training (2A-29). Like the 1938 programme, the skills are rarely mentioned outside of their own discrete bailiwicks (i.e., Math skills in Math class, English skills in English class). It is only in Religious Instruction that the importance of reading skills is re-enforced, and then it is only seen as a practical tool to understanding the beauty of the text, for a higher religious purpose (2B-15, 2B-17).

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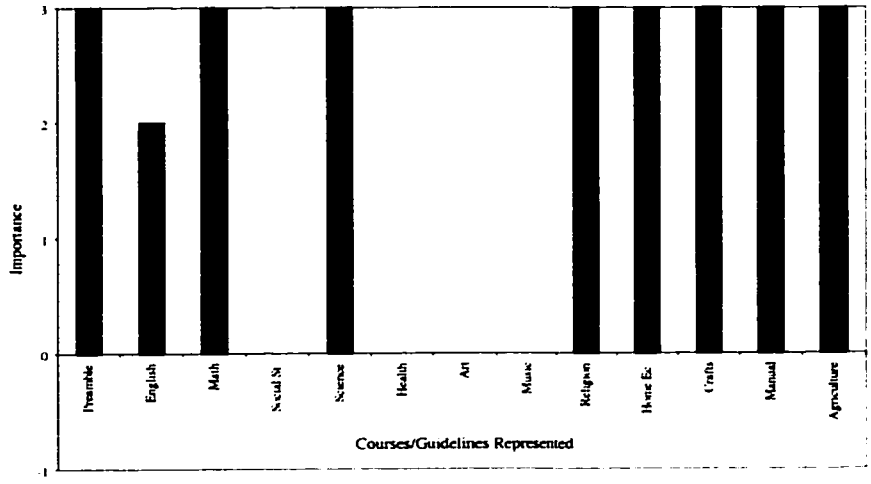
[1] "The mere act of memorizing can, and often does, become a barren occupation, resulting in meaningless repetition of passages only half assimilated" (2B-32).

Manual/Practical Skills

The importance of Manual/Practical skills was re-emphasized and re-affirmed by this programme, which again promoted the benefits of hands-on practical crafts as a natural conduit for early adolescents to grasp higher intellectual ideals. Through the creation of models, murals and other craft-related endeavours, students make connections to the principles behind the action, and thereby "the immediate and transitory interests of pupils should be transformed into enduring purposes" (2A-15). Because they grab students' interest, they act as a jumping off point for higher intellectual, spiritual, and social study (2A-22, 2A-23, 2A-25, 2A-26, 2A-36, 2A-44f, 2A-70, 2A-75; 2A-91, 2A-92, 2A-93, 2A-95, 2A-97, 2A-102, 2A-104, 2A-105, 2B-17, 2B-19, 2B-21, 2B-35). Situational problems, such as budgets, discount percentages and mortgage rates are again included throughout this period, but are contained primarily within the Math and Science areas (2A-55, 2A-58, 2A-59, 2A-60, 2A-61, 2A-64, 2A-68, 2A-69, 2A-92, 2A-101).

Figure 2.1.3 - The Importance of Manual Skills



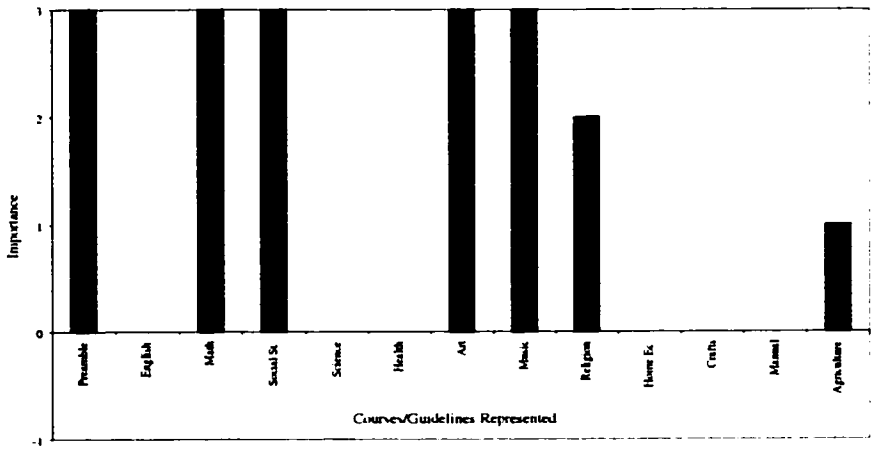
A certain rift does appear to be forming between the academic subjects (English, Math, Science) and the essentially manual ones (crafts, music, agriculture), however. The latter now seem to recognize their skills as worthwhile endeavours in their own right, rather than as mere means to a separate end. As mentioned above, the authors state that some children are more adept at practical skills and should be encouraged as society will benefit from this (2A-7, 2A-8, 2A-14, 2A-17). The new Manual Training course reflects this belief. While the subject was thought to help a well-rounded education (2A-98, 2A-

99), it was also believed that it should be subjugated to a certain time period, a certain area, with a specialist teacher (2A-96), rather than integrated within the more academic courses. Agriculture is even more blunt – it goes as far as saying that academic pursuits have no place in the study of their branch of learning - it can only be done through hands-on activities in the specific Agriculture class (2A-106, 2A-107).

Social Skills

In this programme, the integration of social skills maintains its fairly formidable stature, with the benefits of good citizenship and teamwork being re-iterated throughout choice subject areas (2A-3, 2A-4, 2A-12), and the republication of "Corporate Activities" (2A-44). Giving this form even more importance is the addition of a special section now devoted to reaching social harmony (the Enterprise). Again, the authors strongly discourage any transmission-style form of teaching democracy. Believing that we can only develop our character through association with others, they suggest that as much social interaction as possible should be integrated into the school day (2A-5, 2A-6, 2A-14). Especially important for the programme is the inclusion of examples that show how cooperation and consideration for others help students reach a common goals and peace (2A-3, 2A-4, 2A-48, 2A-51, 2A-83, 2A-89, 2A-104). Unlike the earlier programme, however, this document gives much more credence to the other side of socialization: that students should be taught to act and communicate in a socially acceptable manner (2A-4, 2A-13, 2A-49, 2A-14); that they must learn about their rights and responsibilities as citizens (2A-9, 2A-62, 2A-76, 2A-45, 2A-47, 2A-51, 2A-52, 2A-101, 2B-6, 2B-11, 2B-

Figure 2.1.4 - The Importance of Social Skills in Period 2



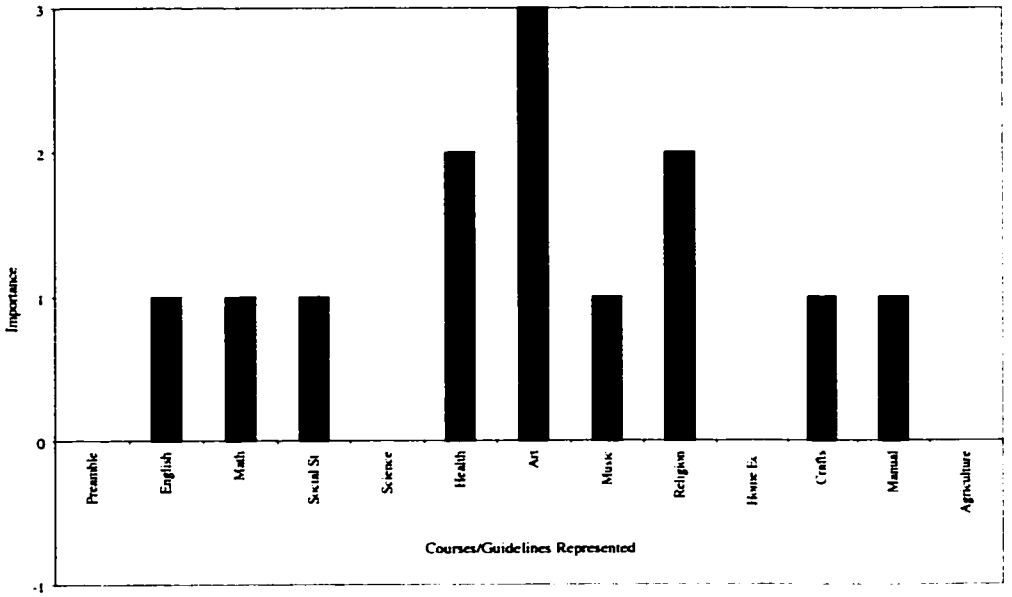
12); and that in turn, they should be taught to accept the ideals of society and develop skills that will help them fit in (2A-4, 2A-8, 2A-10).

One obvious reversal of this trend can be seen in Social Skills' negligible priority by all the hands-on courses. They apparently disassociate themselves from this form to concentrate on manual skills – this is especially surprising in the Crafts course, which had rated the form as highly important in Period 1.

Individual Development

By 1942, the concept of "Social Individualism" seems to have given way to the more one-sided promotion of the "socially satisfactory personality" (2A-4). The major difference between the two concepts stems from the revised programme's belief that character development does not come from within the individual, but only through the stimulus of social participation (2A-6).[2] Rather than showing any focus on individual growth and the child's natural development, therefore, the programme recommends that teachers should try to encourage certain acceptable qualities that it feels would avail themselves to the student in the modern world, and in turn benefit society. These would include self-

Figure 2.1.5 - The Importance of Individual Development in Period 2



control, intelligent self-direction, the ability to accept responsibility (2A-4) with consideration for the rights of others (2A-28). While everyone has individual talents (2A-7, 2A-85, 2A-87), the programme concludes that it is the school's purpose to encourage only socially valuable ones (2A-8). It is quick to qualify this statement, however, by adding that these traits cannot be taught to the student through coercion or unfair inculcation - the child must be lead willingly to accept ideals approved of by society (2A-10, 2B-10, 2B-32, 2B-26)

Some of the recommended development revolves around self-evaluation (2A-38). Crafts, especially promotes the teaching of life's hard lessons to develop a stronger personality: "Handwork has value also in helping children to recognize the importance of accuracy, for mistakes in the concrete are easily recognized and can seldom be erased or wholly corrected" (2A-91). Vestiges of the 1938 programme do remain in some subject areas, however. Little is changed in the Math (2A-61, 2A-62), Health (2A-76, 2A-80), and Music areas. In fact an increased effort is made to keep children mentally healthy (i.e. safe from ridicule, monotony, etc) (2A-39, 2A-57, 2A-77). As well, Art continues to encourage aesthetic development in the student, unhindered by any connection to social benefits or mores (2A-83). In many areas as well, the programme merely asserts that one of its general desires is to produce a well-rounded person (2A-34).

Underlying Principles

A host of new underlying principles appear in this programme (now doubt spurred on by Canada's war-time effort), mostly extolling the benefits of democracy based on Christian ideals and its bulwark - the British Commonwealth. These are repeatedly mentioned in many passages of the preamble, Enterprise and Social Studies sections (2A-3, 2A-4, 2A-5, 2A-10, 2A-11, 2A-12, 2A-13, 2A-44, 2A-48, 2A-52, 2A-56, 2A-68, 2A-69, 2A-83). This exhortation goes beyond the mere teaching of social skills, however, treating "Social Living" and the "Enterprise Method" as much a creed as a learning tool (2A-22, 2A-23,

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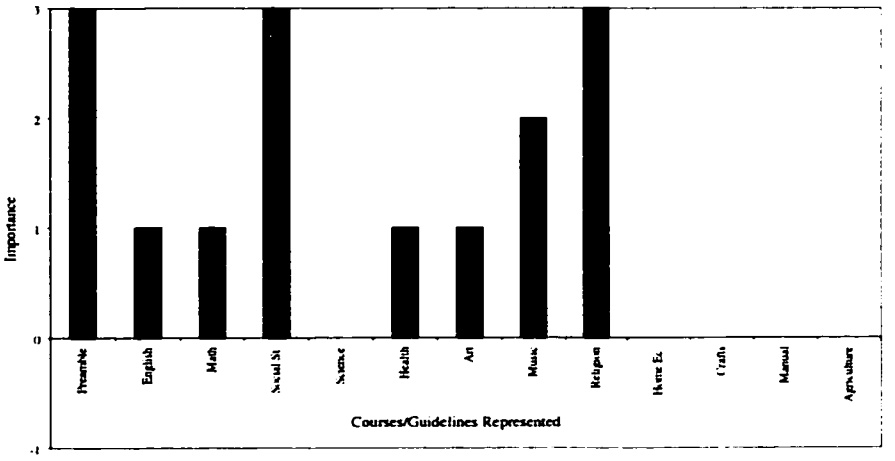
[2] This sentiment was not abnormal for the time it was written – in fact it merely reflected contemporary educational thought of the time. This is seen especially in the work of Dewey (1916, 1934) and in the thought of the Behaviourist philosopher B.F. Skinner (1948).

2A-24, 2A-28). While these underlying principles gather mostly around these three areas, all core courses make, at least, a passing reference to their importance. As mentioned earlier, however, the more vocational subjects remain silent on this issue.

Lastly, the newly created section of Religious Instruction bases its entire course work on one underlying principle - the teaching of "the fundamental truths of religion and their bearing on human life and thought" (2A-11). However, while this gives a new credibility to the subject and ensures that these values will be inculcated, it also does not do much to promote integration, encouraging an isolation of the subject to the one half hour a week period (see entire 2B section).

Figure 2.1.6 - The Importance of Underlying Principles in Period 2



	Ministry	Board	School	Classroom
High Priority (3)	Programme revised by Department, based on suggestions by inspectors and teachers during the previous four years. Department welcomes further criticism. (2A-1). Thanks are expressed to other provincial Departments of Education Departments, and British authorities (2A-2). Like the 1938, the new programme is to be applied by individual teachers, within a sharp 1-year time limit for implementation, and progress is to be monitored by departmental inspectors. Again, some formally integrated components remain, mandated by the Department (2A-82), while other areas are more flexible in regards to the handling of the curriculum (2A-84). As before, suggestions are made to teachers that they can accept or reject (2A-78, 2A-83). It details aims and topics for each requisite and optional course and repeatedly reminds teachers to adhere to the limitations and interests of their students (see Dimension B). More references to academic work than in the 1938 programme, but still a heavy reliance on norm control (2A-4, 2A-11, 2A-14, 2A-40; 1A-44). The Programme specifically describes the "Enterprise Method", its application in schools, concrete details of form and implementation (2A-20-43). It recommends that as teachers become more familiar, projects should take up half the morning and can go on for weeks (2A-40, 2A-41). It makes book recommendations for help (2A-43). In 1944, the Department prescribed a new religious-knowledge course to be applied in all Ontario schools (2B-1-5, 2B-17, 2B-29). Manual Arts specialists requested (2A-96) but asked to collaborate with the classroom teacher (2A-99).			Teachers' feedback has been applied to the revised curriculum. (2A-1) Teachers are the primary implementers of the innovations. Aside from the highly recommended Enterprise approach (2A-30 to 33), methods and time allocation are largely teacher responsibility (2A-11, 2A-12, 2A-13, 2A-14, 2A-17, 2A-40, 2A-41, 2A-42, 2B-30) More leeway seems to be given in ungraded schools to experimentation with curriculum integration (e.g. 2B-36) Suggests that teacher groups should be organized for the purpose of sharing experiences and discussing common aims and problems (2A-18) In the Enterprise Method, children are to be heavily involved in the curriculum integration process (2A-27, 2A-28, 2A-30, 2A-37, 2A-38).
Medium (2)				
Low Priority (1)			Discusses the role of the school in handling the curriculum (2A-3, 2A-9 to 2A-14), especially advocating a flexibility of implementation and evaluation of the programme (2A-7) Hints that the Enterprise can be used school-wide (2A-23) The school must keep a certain "atmosphere" (2A-11, 2A-12, 2A-13, 2B-10, 2B-12) No mention of Principal's role except choosing proper teachers for religious education (2B-16)	
0		No mention		

Figure 2.3 – Loci of Integration (Dimension C) in Period 2

	Completely Horizontal (integration among subjects but separated by Grades 7 & 8)?	*Downwardly Vertical (Grades 7 & 8 linked to the Elementary system)*	*Upwardly Vertical (Grade 7 & 8 linked to the Secondary System)*	*Completely Vertical (Grade 7 & 8 seen as part of a complete education with no breaks)*	*Insular vertical (Grade 7 & 8 linked but seen as a separate entity from elementary & Secondary)*
High Priority (3)					Especially in ungraded schools, it is suggested that grades 7 & 8 should be combined for much of the work (2A-17, 2B-34) Increasing use of the Enterprise Method should be made in grade 7 & 8 (2A-29). Adolescence (grades 7 &8) is a special, separate time from other grade levels (2A-16, 2A-59, 2A-70, 2A-77, 2A-91, 2A-96, 2B-25, 2B-32, 2B-33)
Medium (2)		Ungraded classes have much greater flexibility (2B-33, 2B-34, 2B-35)			
Low (1)	Only exception is the divergent areas of study in social Studies (2A-51, 2A-52)	Mention is made that teachers should be familiar with Grades I-VI programme (2A-46, 2A-47, 2A-76)			
Negligible (0)	Except for the separation of content and projects, no large distinction made between 7 & 8.		Many children expected to leave school at age 16 (2B-29)	No connection drawn (2B-29)	

Figure 2.4 – The Relationship Between Grades 7-8 and the Other Grade Levels (Dimension D) in Period 2

	Nested	Multi	Cross	Correlation	Pluri	Insertion	Fusion	Thematic	Harmonization	Trans
Preamble		[illegible]						The Enterprise Method dominates the curriculum all disciplines may apply as needed (2A-20 to 2A-43) Learning by purpose not subject (2A-15, 2A-25, 2A-27)	Citizenship and social from inundates the curriculum Seen in most subject areas Social Studies English Enterprises Corporate Activities (2A-12, 2A-13, 2A-14, 2A-44 see also Underlying Principles Dimension A)	Children have a say in the creation of curriculum integration but severely limited (see Enterprise 2A-20 to 2A-43)
Social Study	Teachers should be [illegible] (2A-50)					Social Studies includes conservation studies, etc (2A-51)	Social Studies (2A-47)			
English				Music, Art, Craft, English can be combined in 1 class – vague (2A-17) English & Scripture (2A-58, 2B-17)		English to apply reading and writing exercises from other disciplines: (2A-58)				
Math	Teachers may [illegible] (2A-31)		Math drawings can be used in art class (2A-87)	Teach physical environment through math (2A-9)		Math applies tasks related to other subjects & practical activities (2A-68, 2A-69)		Practical problem to be solved (2A-65)		
Science	Content arranged in [illegible] (2A-70, 2A-72, 2a-75)		Scientific Drawings can be used in art class (2A-87)	Health in connection with Science or Home Economics (2A-78, 2A-82) Teach environment through science (2A-9) Agriculture correlated to science (2A-102)			Science still seen as a [illegible] (2A-71)	In Science, discussion leads to a problem requiring experimentation (2A-75)		
Health		Music & Phys. Ed. may combine as Rhythmics (2a-83)		Health should be taught in connection with Science or Home Economics (2A-78, 2A-82)						
Music		Music & Phys Ed may combine as Rhythmics (2a-83)		Music, Art, Craft, English can be combined in 1 class – vague (2A-17)						
Art			Math or Scientific Drawings (2A-87)	Music, Art, Craft, English can be combined in 1 class – vague (2A-17)					Art supposed to infuse curriculum – society (2A-84, 2A-90)	
Crafts				Music, Art, Craft, English can be combined in 1 class- vague (2A-17) Agriculture correlated to crafts (2A-102)						
Manual Training		Manual Training Teacher [illegible] consult with other teachers (2A-97)	Manual Training has carry over to other subjects (2A-97)							
Home Ec				Point out common ground between certain subjects (2A-101, 2A-102, 2A-102) Crafts [illegible] correlated to Agriculture (2A-102)						
Agriculture				Point out common ground between certain subjects (2A-101, 2A-102, 2A-102) Correlated to Science, Crafts and Home Economics (2A-102)						
Religion			Religion [illegible] History (2B-25)	English and Scripture (2A-58, 2B-17) [illegible]				Religious lessons [illegible] projects (2B-1, 2B-19, 2B-35) [illegible]	Religion [illegible] (2A-11, 2B-11, 2B-13) [illegible]	

Figure 2.5 – The Integration Methods/Approaches Used (Dimension E) in Period 2

High Degree of Awareness (3)						Grade 7& 8 to combine for much of work. (2A-17, 2B-33 to 2B-36)	pupil's capacities (2A-7, 2A-50, 2A-85) In Enterprise - class collaboration on culmination phase (2A-37, 2A-38, 2A-39) No formal testing in Religion (2B-14)			
Fair Degree of Awareness (2)	In the Enterprise, teachers give some power to pupils & blur subjects, periods (2A-20, 2A-23, to 2A-32, 2A-37 to 2A-43) Look for individual talent - no standard (2A-7, 2A-8, 2A-57, 2A-77) Religion, citizenship to imbue the curriculum (2A-11, 2A-12, 2A-14) Teachers must avoid minutae – be more flexible, adaptable (2A-71, 2A-73, 2A-78, 2B-9, 2B-17, 2B-18)		In Science, topics can be left until opportunity arises (2A-71, 2A-72, 2A-78) Don't put undue pressure on students - would injure mental health (2A-77, 2A-79) Manual Training an option - schools have choice (2A-96 to 2A-100)	Advocates teacher discussion groups (2A-18) & Manual Training/classroom teacher links (2A-99).		Enterprise breaks course structure, but details sketchy (2A-25, 2A-35, 2A-40, 2A-41, 2A-42) Teaching order not mandated. (2A-73, 2A-78, 2B-30, 2B-36)				Accepts teachers need about specific methods. Library services (2A-19, 2A-43, 2A-65) Relents a little on the options (2A-16)
Vague Evidence (1)		For Enterprise, amount of time depends teacher (2A-40) Making students active learners will take time (2A-44d)	Details "Enterprise" method (2A-20 to 2A-43). clear that it does not replace "familiar" teaching methods, but a mandatory supplement (2A-29).			Citizen training at teacher's discretion, but informally in Social Studies (2A-12, 2A-13, 2A-45 to 2A-52)			Accent on society, fitting in (2A-9, 2A-10, 2A-14, 2B-12). But role of parents/ community left vague except for corporate activities (2A-44g) Manual Training & crafts - home items needed (2A-95, 2A-100)	
No Evidence (0)		Implement ASAP	Religion & civics added(2A-11, 2A-12, 2A-13) Enterprise said to take up much time (2A-40, 2A-41). But nothing removed (see 2B)		No mention	Religion changes from fluid (2A-11) to concrete period (2B-3, 2B-17). Special Manual Arts/religion teachers (2A-96, 2B-4, 2B-16)		No mention		

Figure 2.6 - Awareness of Implementation Impediments (Dimension F) in Period 2

	Prof. Dev.	Add'l Res	Parental Support	Community Support	Board	Principal Support	Role Model	Teacher Support	Adaptability	Open Policy Creation	Student Collaboration
Actively Provides (3)		Free loans of readings on Enterprise & other modern teaching methods (2A-19, 2A-43, 2B-17)							Flexibility in choice of topics (2A-17, 2A-67, 2A-72, 2A-78) Enterprise to arise naturally: Can fit many areas(2A-22, 2A-23, 2A-25, 2A-35, 2A-40, 2A-41, 2A-42) Optional subjects can be altered if lack of equipment. (2A-16) Can experiment with methods, especially in ungraded situations (2B-30, 2B-36)		Students to direct choice of Enterprise where possible. Students still bounded (2A-67, 2A-73, 2A-89) but Enterprise gives students a lot more freedom (2A-20 to 2A-43)
Actively Encourages (2)	Suggests discussion groups for informal mentoring (2A-18, 2A-99)						Read examples to perfect Enterprise (2A-43) Qualified teacher in religion (2B-16)	Hopes teachers will be anxious to take on new curriculum roles (2A-11) Success will be greater if teachers share & are enthusiastic (2A-18)			Self/group testing encouraged (2A-37, 2A-38, 2A-39) Students encouraged to direct much of school discipline (2A-44)
Passively Encourages (1)		For Religion, teachers should go to local libraries (2B-21)	Rprint from 1938 - parents help in Corporate Activities (2A-44g)			The school (therefore principal) has threefold task to assist integration (2A-9 to 2A-16) In charge of appointing Religion teacher (2A-16)				Curriculum revised on teachers' suggestions - encourages more (2A-1). Discussion groups encouraged (2A-18)	
No Evidence (0)				Like 1938 - School prepares students for society(2A-12, 2A-13, 45, 2A-48), but nothing is asked in return.	No mention		Says teachers sitting in on other classes "would be impractical" (2A-43)	However, quite clear throughout that this is more work, not less		Religion not an open policy (2B-1 to 2B-6)	

Figure 2.7 - Factors for Assisting or Impeding Curriculum Integration Implementation (Dimension G) in Period 2

	Content	Academic Processes	Practical/Manual Skills	Social Skills	Individual Development	Underlying Principles
High Priority (3)				The subject will help students understand the workings of society and citizenship (3C-6, 3C-19, 3C-62, 3C-63, 3C-68, 3C-69, 3C-71, 3C-76, 3C-79, 3C-85, 3C-87, 3C-92, 3C-98, 3C-108, 3C-109, 3C-121, 3C-135, , 3C-136, 3C-137, 3C-141, 3E-2)	New course will accommodate individual students' needs and develop their individual talents. (3A-3, 3A-4, 3C-5, 3C-13, 3C-21, 3C-22, 3C-49, 3C-101, 3C-108, 3C-123, 3C-126, 3D-1, 3E-1, 3E-5, 3E-7, 3E-8, 3E-19) Students should be stimulated to work on Self-development, imagination, initiative, self-confidence, etc. (3C-10, 3C-20, 3C-27, 3C-28, 3C-29, 3C-31, 3C-50, 3C-66, 3C-67, 3C-88, 3C-89, 3C-101, 3C-109, 3E-4, 3E-13)	Citizenship & the Democratic way of life. (3C-19, 3C-64, 3C-64, 3C-66, 3C-69, 3C-79, 3C-121, 3C-133, 3C-136 Acceptable Behaviour and knowing where you belong in society (3C-10, 3C-30, 3C-54, 3C-58, 3C-67, 3C-68, 3C-121, 3C-135, 3C-140, 3C-141, 3E-19)
Medium (2)	New emphasis on "conservation" introduced with information to be dispersed throughout the curriculum (3A-7, 3A-8, 3C-91, 3C-104, 3C-105). Obsolete material is removed (3A-11, 3B-6), while new matter to be added in inventive ways. New guidance content introduced throughout the curriculum (3C-13, 3C-37, 3C-68, 3E-14). Health continued, broadened, formalized, involving more subjects (3C-15, 3C-16, 3C-123, 3C-140). Subject matter can be correlated between areas (3C-73, 3C-77 to 3C-84). Memorization of English literature and word origins adds to a stock of knowledge (3C-20, 3C-28, 3C-38, 3C-44) However, while facts, arranged in a unified pattern (e.g. themes), enhance understanding, they cannot be an ends in themselves (3C-70, 3C-71, 3C-87, 3C-98, 3C-104, 3C-105)	English skills taught across curriculum (3C-19, 3C-34, 3C-53, 3C-67, 3C-73, 3C-77, 3C-78, 3C-81, 3C-82, 3C-83,3C-90, 3C-94, 3C-98, 3C-117, 3D-6) Library/Research skills (3C-35, 3C-36, 3C-65, 3C-74, 3C-77, 3E-9)	Learning experiences should be selected from everyday, practical, realistic issues. (3B-7, 3C-39, 3C-51, 3C-52, 3C-55, 3C-85, 3C-86, 3C-93, 3C-95, 3C-96, 3C-97, 3C-117, 3C-120, 3C-126, 3C-129, 3C-136, 3C-138) Courses of studies should be constructed to meet local community needs (3C-6, 3C-75, 3C-81, 3C-133, 3C-136) Students need to see what awaits them (3C-132, 3C-133, 3C-135, 3C-136, 3E-5, 3E-13, 3E-17)	Group work included in Guidance so that students know their strengths, weaknesses, contributions they can make to society (3C-13, 3E-2, 3E-9, 3E-15, 3E-17) Group discussion in English leads to more enjoyment of literature, acceptance of rules of courtesy, constructive criticism and increased confidence (3C-29, 3C-46, 3C-47) Tailor language, behaviour to meet social context and using social etiquette (3C-10, 3C-30, 3C-45, 3C-54, 3C-67, 3C-68, 3C-117, 3C-140) Dramatic productions, team sports, conducting meetings teaches cooperation, leadership skills (3C-49, 3C-55, 3C-59, 3C-61, 3C-77 to 3C-84) Students should take active part in creation of course, group work, discussion (Home Economics, Social Studies) (3C-65, 3C-126 to 3C-129, 3C-136)	English and Art improve aesthetic taste (3C-20, 3C-28, 3C-29, 3C-41, 3C-42, 3C-56, 3C-108, 3C-109)	Concrete icons of "Good Taste" and nobility (3C-27, 3C-28, 3C-29, 3C-35, 3C-41, 3C-42, 3C-44, 3C-110, 3C-114) Conservation (3A-6, 3C-91, 3C-92, 3C-98, 3C-104, 3C-106)
Low Priority (1)		Learn math skills that can be used in general (3C-89, 3C-92, 3C-117, 3D-6) New subject of Map reading introduced into Social Sciences (3A-9)	Students at this age possess a vocational bent and this should be introduced (3C-4, 3C-10) To get at higher learning, manual work is needed, e.g. models, drama (3C-49, 3C-77, 3C-78, 3C-79, 3C-82, 3C-112, 3C-113)		Develop physical and mental health habits (3C-16, 3C-17, 3C-59) Life-long self-education (3C-10, 3C-20) Being a useful member of society leads to personal happiness - Home Economics (3C-10, 3C-121)	Multiculturalism and peaceful coexistence (3C-77, 3C-78, 3C-84)
(0)						

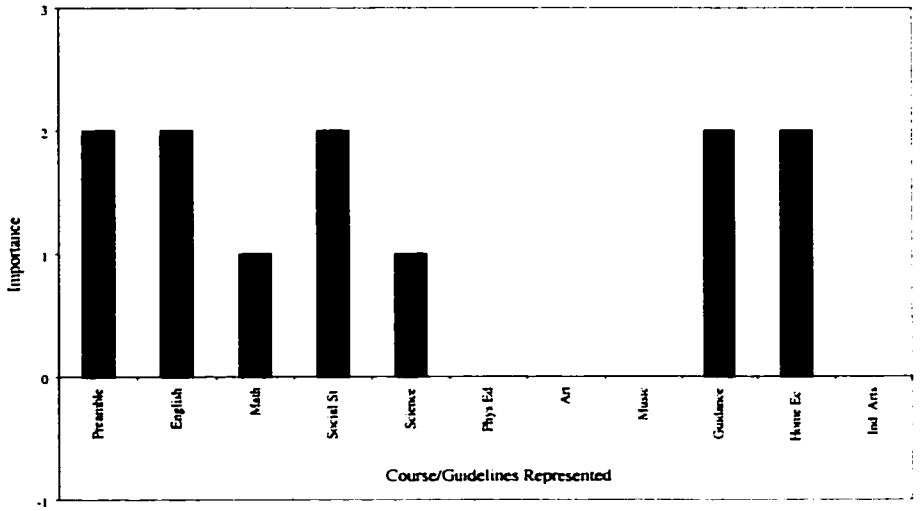
Figure 3.1 - Elements Used During Integration (Dimension A) in Period 3

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 3

Content

The new programme put a renewed emphasis on content, stating that certain facts are necessary for students to progress in the modern world. However, like the previous documents, Curriculum I:1 recognized that content must at all times be subservient to meaning. Facts and dates must not be given to students without them knowing the larger purposes as to why they are studying it. It is necessary, therefore to organize content in such a way that there is "a natural growth from knowledge which is fragmentary and accidental to knowledge which is unified and meaningful" (2C-70). The basis of each curriculum, therefore is not the content, but the logical system created by each course - content merely supports this system, it is not an end in itself (see 3C-104, 3C-105). This philosophy is echoed in almost all core courses, such as Social Studies (3C-70, 3C-71), Math (3C-87), Science (3C-98). However, a distinct rift has occurred between the academic and non-academic subjects, content being conspicuous by its absence in the latter. The change toward this "content-friendly" attitude is perhaps most marked in English, which replaces individual development with a drive to teach the students certain ideals and types of writing. It carefully explains that the study of these conventions "adds to the pupil's stock of general knowledge, thus enabling them to form personal opinions upon a variety of subjects" (3C-20). The edification of recitation and memorization are also pointed out (3C-28, 3C-38, 3C-44).

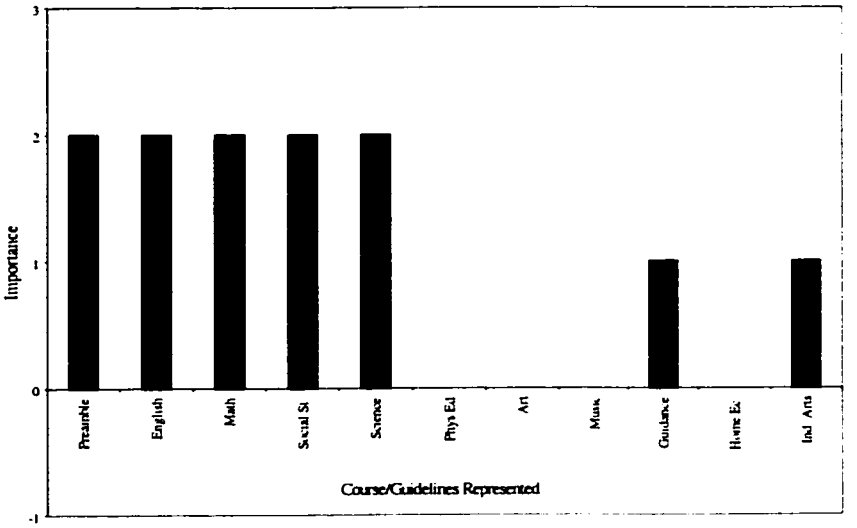
Figure 3.1.1 - The Importance of Content in Period 3



Academic Skills

Memos assure parents that the new curriculum will reflect a renewed importance placed on "the three Rs" (3D-6). Primarily, this was to be shown by their pervasion throughout the curriculum rather than in isolated niche subjects. Reading and writing are perhaps the skills that benefit the most from this renaissance. While the curriculum does recognize English as the primary purveyor of this skill (3C-19, 3C-34, 3C-53), other subjects are considered suitable to include some limited study of literature and writing activities. Social Studies is especially important in getting additional practice in reading books and poetry (3C-67, 3C-78, 3C-82, 3C-83) and creative writing, dramatizations of historical figures, and imaginary historical diaries (3C-73, 3C-77, 3C-81, 3C-82). As well, the Geography took on the fairly specific skill of map *reading* (3A-9). Math (3C-90, 3C-94), Science (3C-98), and Industrial Arts (3C-117) all entreat teachers to include subject related reading material so that the students may be able to develop two skills at once.

Figure 3.1.2 - The Importance of Academic Skills in Period 3

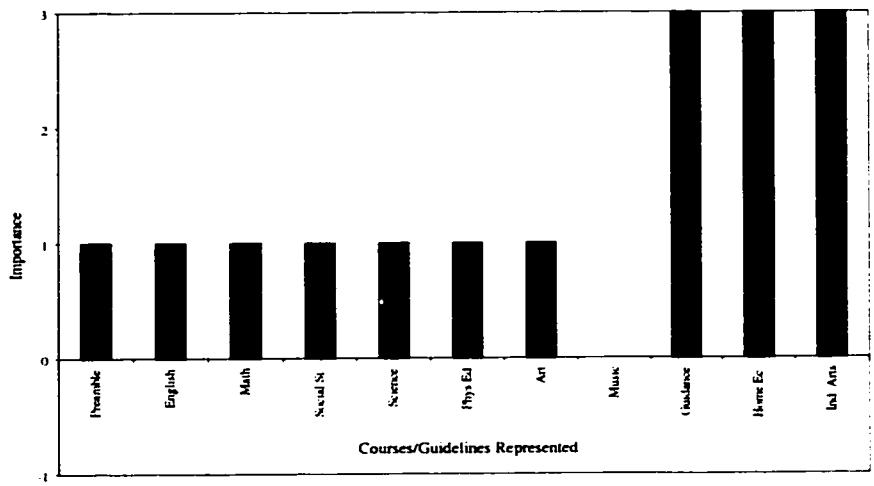


The other "basic skills" praised by the memos appear to put in a less prosperous showing across the curriculum. Library/Research skills are still recommended in the preamble, but with less widespread applicability, finding a niche in the areas of English (3C-35, 3C-36), Social Studies (3C-65, 3C-74, 3C-77) and, to a certain extent, in Guidance (3E-9). Math skills, while being praised as universal, are mentioned only in its name subject (3C-89, 3C-92) and in Industrial Arts (3C-117).

Practical/Manual Skills

Practical/Manual Skills still appear to have great importance for the Department. However, the reasons behind this are beginning to shift during this period - hands-on activities are overshadowed by a concern to let students connect with the world around them and to let them know what will await them in the future. This desire is reinforced throughout the curriculum through the use of a myriad of examples that are selected from everyday, practical, realistic issues (3B-7). English teachers are specifically warned against teaching literature that the students would consider too esoteric, as it would dull interest (3C-39). Similarly, students should not be encouraged to write about subjects that are not within their immediate experience as this "encourages pretense and platitudes (3C-51). An effort must be made to ensure that writing exercises (3C-52, 3C-55), experiences in Social Studies (3C-75), mathematical problems (3C-85, 3C-86, 3C-93, 3C-95, 3C-96, 3C-97) or Art projects (3C-112, 3C-113) be practical with examples taken from the community. The Department recommends that local community needs be examined carefully when constructing each course (3C-6, 3C-81, 3C-133, 3C-136). "The World of Work," waiting for students after their education also begins to loom in almost every subject area, as well as the newly created Guidance course (3E-17). In these inserted sections, teachers are repeatedly urged to help students prepare adequately for future occupations (3C-132, 3C-133, 3C-135, 3C-136, 3E-5, 3E-13, 3E-17).

Figure 3.1.3 - The Importance of Manual Skills in Period 3



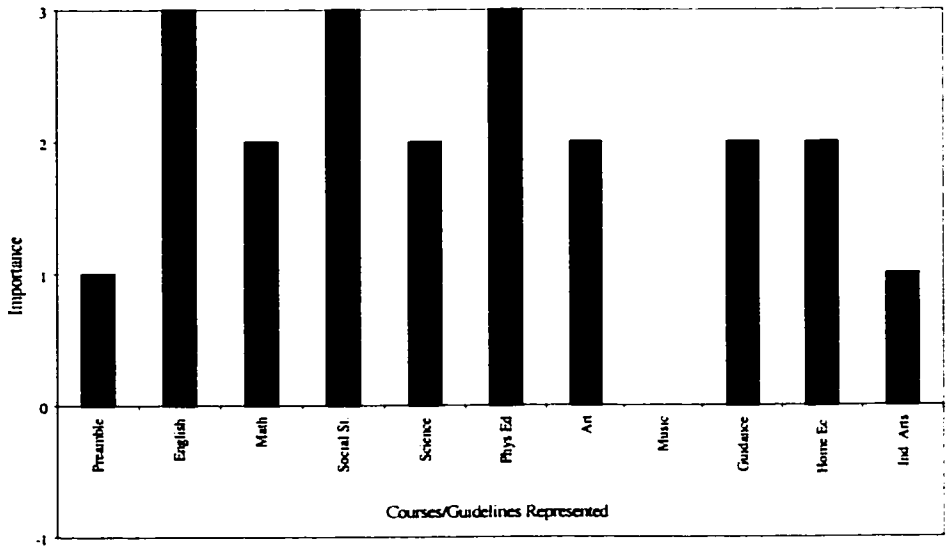
Lastly, while it holds a much-diminished place, some mention is made about the uses of manual work in stimulating higher learning. In English and Social Studies, students are encouraged to make models, or put on dramatic presentations (with costumes and properties) to describe a scene from the

community, from literature or from history (3C-49, 3C-77, 3C-78, 3C-79, 3C-82). However, it is clear that the more academically-oriented courses (especially Science) are becoming less concerned with concrete activities to be replaced by more abstract ones.

Social Skills

More uniformly applied across the subject areas than in previous periods, social skills hold a commanding presence within the curriculum. However, the tenor of the statements has changed from active, engaged participation and group dynamics to a more passive understanding of the workings of society and the responsibilities of citizenship (3C-6, 3C-19). The guideline appears to have felt that teachers had a responsibility to help students tailor their language and behaviour to meet social context, to use proper social etiquette (3C-10, 3C-30, 3C-45, 3C-54, 3C-67, 3C-68, 3C-117, 3C-140) and, through dramatic productions, team sports, and meetings, to develop the skills of courtesy, leadership and teammanship (3C-49, 3C-55, 3C-59, 3C-61, 3C-77 to 3C-84). Rather than prescribing a type of activity that promotes group cooperation, like the Enterprise, the Department tends to make fairly abstract suggestions and leaves specifics to the teachers' discretion (3C-62, 3C-63, 3C-68, 3C-69, 3C-71, 3C-76, 3C-79, 3C-85, 3C-87, 3C-92, 3C-98, 3C-108, 3C-109, 3C-121, 3C-135, 3C-136, 3C-137, 3C-141, 3E-2).

Figure 3.1.4 - The Importance of Social Skills in Period 3



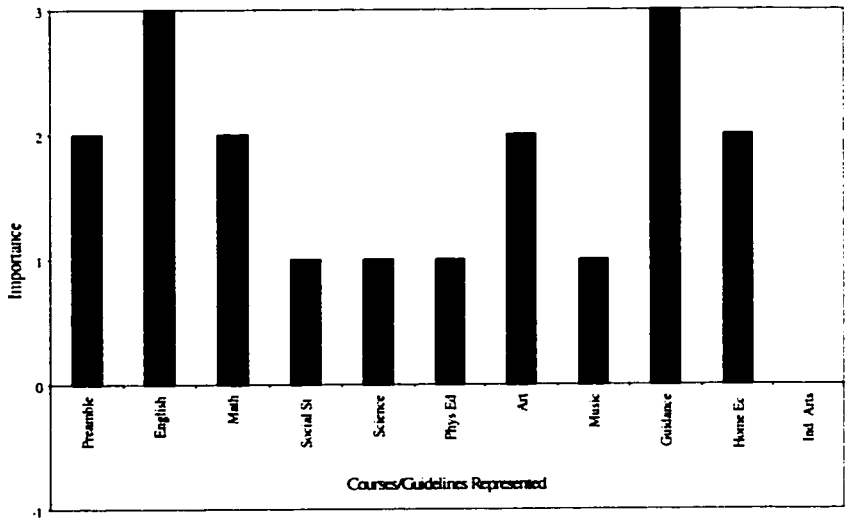
Suffering from an obvious negative backlash of the last period, the Department appears to shrink back from the outright recommendation of student-lead activities. While group work is encouraged, the

Department recommends that these activities be bounded by teacher intervention or a strict code of conduct so as not to let students stray from the path of learning. Guidance activities, for example, had to relate to the students' potential contributions to society (3C-13, 3E-2, 3E-9, 3E-15, 3E-17), while English group discussion had to lead solely to the enjoyment of literature, acceptance of rules of courtesy, constructive criticism or increased confidence in the field of English literature (3C-29, 3C-46, 3C-47). The same spirit holds true for both Social Studies and Home Economics. Students are encouraged to take an active part in the creation of course, group work, and discussion. However, it is for the benefit of the subject rather than for social interest that this is promoted (3C-65, 3C-126 to 3C-129, 3C-136).

Individual Development

According to the introduction of Curriculum I:1, all courses are to make accommodations for Individual Differences and find opportunities to develop student's personal interests. However, it becomes quickly apparent that the various aspects of this form will be divided along traditional subject lines.

Figure 3.1.5 - The Importance of Individual Development in Period 3



English gets a large share, as it tries to promote individual talents, stimulate self-development, imagination, initiative and self confidence (3C-20, 3C-21, 3C-22, 3C-27, 3C-28, 3C-29, 3C-31, 3C-49, 3C-50), along with a taste for finer literature and morals (3C-20, 3C-28, 3C-29, 3C-41, 3C-42, 3C-56). Art falls into the traditional role of developing aesthetic taste (3C-108, 3C-109), while Physical Education's mandate is to develop good physical and mental health habits (3C-16, 3C-17, 3C-59). The rest of the courses, Science (3C-101), Home Economics (3C-10, 3C-121, 3C-123, 3C-126), Math (3C-88, 3C-89), and Social Studies (3C-66, 3C-67), all play a relatively minor role in

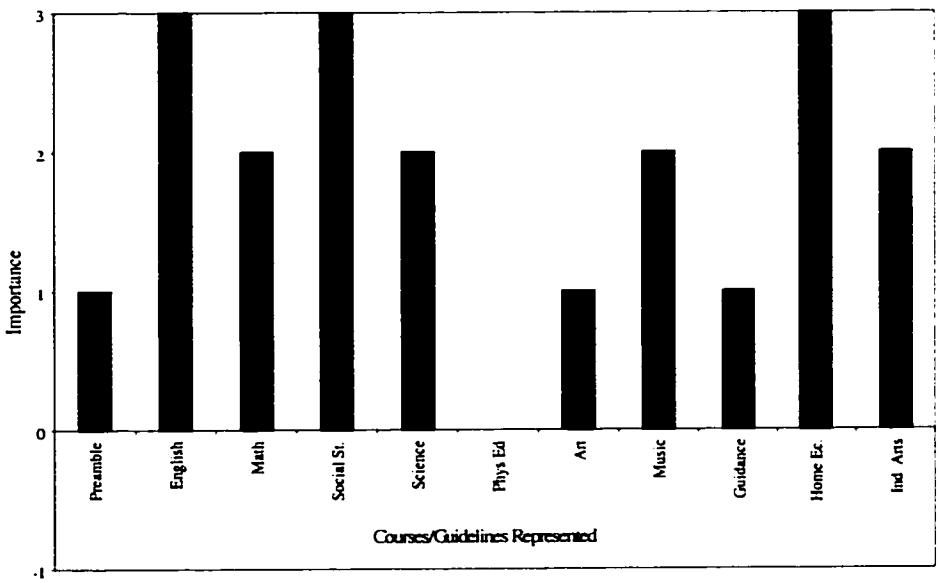
stimulating individual development.

As will be seen later, Individual Develop changed irrevocably when a new course was introduced into the course of studies during this period. Published under separate cover from Curriculum I:1, and given a separate period on the timetable, the new course, Guidance, still took pains to state that it's mandate concerned the whole school staff and that "in reality it is a permeating philosophy of service which should integrate the whole school programme" (3E-1). However, many of the aspects that were earlier given to the other subjects now appear to be centering in this new area.

Underlying Principles

One inextinguishable belief carries over from period 2 - the benefits of citizenship and the Democratic way of life – defended by English (3C-19) and Home Economics (3C-121, 3C-133, 3C-136) alongside the traditional champion, Social Studies (3C-64, 3C-66, 3C-69, 3C-79). Indeed, in some areas the old fire of liberty still sparks up throughout the document with ringing statements of "citizenship is not a subject to be taught but a spirit to be engendered" (3C-69). However, there is an overall "dampening down" of the active elements of democracy, replaced by more urbane principles: acceptable behaviour, (3C-10, 3C-30, 3C-54, 3C-67, 3C-68); studying concrete icons of "good taste" (3C-27, 3C-28, 3C-29, 3C-35, 3C-41, 3C-42, 3C-44, 3C-110, 3C-114); the knowledge of one's place in society (3C-121, 3C-135, 3C-140, 3C-141, 3E-19); and peaceful coexistence in a spirit of tolerance (3C-77, 3C-84)

Figure 3.1.6 - The Importance of Underlying Principles in Period 3



Perhaps as a harbinger to later periods, "Conservation" as a subject of study was first introduced into the curriculum on the recommendation of the Ontario Royal Commission on Forestry. It was necessary, the report emphasized that the enlightenment of youth was the best way of making the next generation more sensitive to the plight of the Canadian environment. However, the Department did not consider it important enough to have an entire course devoted to its study at the Intermediate level, so Conservation was integrated into various subjects (3A-6, 3C-91, 3C-92, 3C-98, 3C-104, 3C-106).

	To promote subject unity	To promote a child-centred curriculum	Social continuity	promote change
High Priority (3)		The programme has been designed to be realistic and seem worthwhile to the students, hold their interest (3B-7, 3C-8, 3C-32, 3C-39, 3C-41, 3C-43, 3C-51, 3C-52, 3C-53, 3C-86, 3C-87, 3C-93, 3C-95, 3C-96, 3C-97, 3C-109, 3C-130, 3C-133, 3C-136, 3C-138, 3E-8) Course should be designed to meet the interests and needs of the student (3C-3, 3C-23, 3C-32, 3C-53, 3C-60, 3C-119, 3C-123, 3C-124, 3C-125, 3D-1, 3E-4) Capitalize on their interests and use them effectively in subject-related activities (3C-26, 3C-35, 3C-37, 3C-41, 3C-47, 3C-72, 3C-98, 3C-99, 3C-101, 3C-114, 3C-117, 3C-133, 3E-5, 3E-7, 3E-12, 3E-17, 3-19) A combination - a common course with special adaptations to address individual differences or talents (3C-4, 3C-5, 3C-9, 3C-21, 3C-22, 3C-32, 3C-49, 3C-90, 3C-111, 3C-115, 3C-129, 3C-134, 3C-136, 3D-1, 3E-19)		Decentralization of curriculum to local bodies, created by teachers committees. (see 3A-1 to 3A-6, 3B-1 to 3B-7, 3C-7, 3C-8) No prescriptive course outlines (3C-2) The new Intermediate Division is hoped to extend students' time in school, and make them participants in society when they leave. (3C-3, 3C-10)
Medium Priority (2)	A need to arrange the courses of study into a unified and continuous programme (3B-2, 3B-5, 3C-3, 3C-62, 3C-70, 3C-100) Grade 7 to 10 should be unified into a single "Intermediate Division" and the Grade 8-9 transition should be bridged (3A-3, 3A-6, 3C-3, 3C-11, 3E-6) Health, Guidance should be integrated into the whole school programme/vision (3C-13, 3C-14, 3C-16, 3C-37, 3E-1, 3E-3, 3E-14, 3E-16, 3E-18) English, Library skills are essential for all other subjects to progress (3C-19, 3C-34, 3C-35, 3C-36, 3C-90, 3C-94, 3D-3, 3D-6)	Must create a mentally healthy environment - pupils must be free from anxiety, frustration, overload (3C-17, 3C-88) Students may choose or take over certain activities/aspects of the curriculum (3C-42, 3C-47, 3C-71, 3C-119, 3C-126, 3C-127, 3C-128) Social Studies activities are activity-oriented but are they child-centred? (3C-77 to 3C-84)	Teaching students to run organizations, lead daily functions. (3C-55, 3C-61, 3C-93, 3C-95, 3C-96, 3C-117, 3C-120, 3C-137, 3C-140) Students should understand the community/nation and their position in it (3C-63, 3C-64, 3C-68, 3C-69, 3C-75, 3C-77, 3C-79, 3C-81, 3C-98, 3C-108, 3C-109, 3C-121 to 3C-125, 3C-130, 3C-132, 3C-133, 3C-135, 3C-141, 3E-2, 3E-5 to 3E-19) Promotion of a population with good attitude, behaviour (3C-28, 3C-29, 3C-30, 3C-40, 3C-44, 3C-45, 3C-46, 3C-54, 3C-56, 3C-67) Curriculum is planned to reflect the needs and outlook of the community (3C-6, 3C-118) Promotion of healthy population (3C-14) Promotion of Basic skills and its role in society (3C-19, , 3C-20, 3C-53, 3C-58, 3C-85, 3C-94, 3D-6)	Promotion of Conservation (3A-7, 3A-8, 3C-91, 3C-92) Pupils and Teacher plan and work together; pupil-teacher evaluation. (3C-126, 3C-127, 3C-128)
Low Priority (1)	Teachers must be aware of what's going on in other subjects, grades (3B-3, 3C-124) Subjects should be grouped together under one home-room teacher (3C-11) Social studies, Home Economics can bring in aspects from other subjects, and vice versa (3C-73, 3C-131)			
0				

	Ministry	Board	School Committees	School	Classroom
High Priority (3)			Local committee in each area (i.e. town) should have Coordinating Committee and Teachers Committee (3B-1 to 3B-4): Teachers appointed by Coordinating Committee; referred problems of local curriculum planning; meet and attend general meetings; may be included in Coordinating Committee; Affiliates of Ontario Teachers' Federation may be included in Coordinating Committee. Teachers Committees have control of curriculum policy. Enshrined in 1950 Memo (3B). Their functions include: Plan local instructional programmes for Intermediate Division; Coordinate subject instruction (i.e. integrate the curriculum wherever possible); Keep detailed courses of study; Delete obsolete topics or those of minor interest to the community; Help teachers improve instruction by providing resources (3B-4 to 3B-7, 3C-2, 3C-7, 3C-8, 3C-10, 3C-15, 3C-18, 3C-118).		Because teachers are on the actual scene, they are in charge of deciding what approach is warranted for each individual class and student. Integration will happen on-site. (3C-16, 3C-21, 3C-22, 3C-23, 3C-26, 3C-86, 3C-130, 3C-131, 3C-137, 3E-15, 3E-17) Home-room teachers are encouraged to take over the teaching of several subjects to one group of students (3C-11).
Medium Priority (2)	Main Coordinating Committee composed of Director of Education, Superintendent of Public Schools, Inspectors of Separate Schools (3B-3, 3B-4): Refer problems to teachers committees; Call general meetings of teachers; Arrange for coordination of courses of study into a unified and continuous programme; Recommend to boards necessary administrative steps. Department reorganizes the Grade levels into Divisions (PJIS) (3A-3, 3C-3). The Department promotes Conservation, etc. through the programme and normal school, removal of material to make room (3A-7 to 3A-11, 3C-91, 3C-92). Basic aims and some integration mandated (3C-16, 3C-18, see 3C incidentally, 3C-92).		By 1952, committees have to inform Department on exact status of courses and revisions. (3D-5)	New Intermediate Division brings Grades 7-10 teachers and teachers of different subjects together to create bonds, have conferences, etc. (3A-6, 3C-3, 3C-135) Subjects with no block of time must be shared between teachers (3E-1, 3C-13, 3C-14, 3C-15, 3C-91) Library a centre for studying different subjects together (3C-35) Wider school activities play a part in combining subjects, bringing students, teachers together (3C-26, 3C-49, 3C-131, 3C-135, 3C-136, 3C-137) A symbiotic relationship between schools, principals, teachers and committees and (3B-3, 3B-4, 3C-6 to 3C-8)	Teachers should just use Curriculum I:1 as an aid to a detailed programme of studies they construct themselves (3C-18).
Low (1)	Many new ideas come to Department from OTF, Inspectors' Association (3A-2, 3C-1). Department High School Entrance Exams discontinued (3A-4). Makes certain suggestions (3C-9, 3C-11, 3C-15). Curriculum I:1 not prescriptive. It is designed solely to help committees draw up their own programme (3C-2, 3D-3)				
0		Not mentioned, except in 1952 that some boards have created curriculum (3D-2) or that they should enforce Department's vision through the course of studies (3D-5, 3D-6)			Both teacher and student together can inspire curriculum integration (3C-127 to3C-129)

Figure 3.3 - Loci of Integration (Dimension C) in Period 3

High Priority (3)	teachers (4B-5) -"Great explosion of [Math] knowledge "must devolve to earlier grades. (4E-1 to 4E-5) -Home Economics content should be seen in relation to other subjects (4F-3, 4F-5, 4F-6) -In French, drill and "over-learning" of a restricted body of material is emphasized (4H-11, 4H-13 to 4H-16) It must be noted, however that content across subjects is not promoted.	4A-4, 4D-23, 4D-28) -The use of notebooks & note-taking ability in all subjects, and accompanying mapping, diagram skills (4D-32, 4C-8 to 4C-17, 4D-12, 3D-27) -Promotion of good study skills (4B-7, 4B-9, 4B-10) -New Math skills and processes necessary. Whole new, discovery approach to math. (4E-1, 4E-6)				Geography (4D-3); History (4A-2, 4A-4, 4D-23, 4D-28).
Medium (2)		Promotion of writing, but it is a very subject centred writing (i.e. scientific writing, geographic writing, etc...) (4C-14, 4C-15, 4C-16, 4E-5) Home Ecomics involves math, science skills (4F-5, 4F-6)				Democratic/Patriotic Principles. (4A-4, 4C-1, 4D-4, 4D-29, 4D-41, 4D-43, 4D-44, 4E-1) Social/Cultural Diversity. (4B-2, 4D-9, 4G-3, 4H-4, 4H-6)
Low Priority (1)			Abstract theories promoted and real life situations downplayed: "Applications which are important today may be unimportant a few years hence" (4E-5) Guidance wants subject teachers to mention the occupational uses of the subject (4B-5) Some mention of Practical Science (4C-1). However, seems unlikely to leave the classroom. (4C18-4C-22) Some discussion of real life, manual application of Home Economics, but much less vocational, more relation to other subjects (4F-4, 4F-5, 4F-6)	Each guideline discusses that they are trying to create citizens, appreciate social problems and differences, and prepare them for societal responsibility, i.e. jobs (4C-1, 4D-4, 4D-9, 4D-29, 4E-1, 4F-1, 4G-7, 4H-4, 4H-6) However, very little social interaction, and that is highly regulated (examples include 4B-7, 4D-29, 4C-13, 4G-3, Guidance and Music discuss esprit de corps (4B-7, 4I-8)	Irrelevant to all subjects except: -self-worth in Guidance (see 4B) -Home Economics - how girl will take social responsibility (see 4F) -Phys. Ed. - how to stay physically fit to reach adulthood and be socially acceptable (ie grooming) (see 4G) -French - Happy students will learn (4H-11) -Music - teach students how to make it their own (4I-1 to 4I-3)	Importance of Conservation continues but almost solely delegated to Science (4C-20) and Geography(4D-15, 4D-16) First hint of "lifelong learning" (4C-17, 4D-22, 4E-4)
(0)						

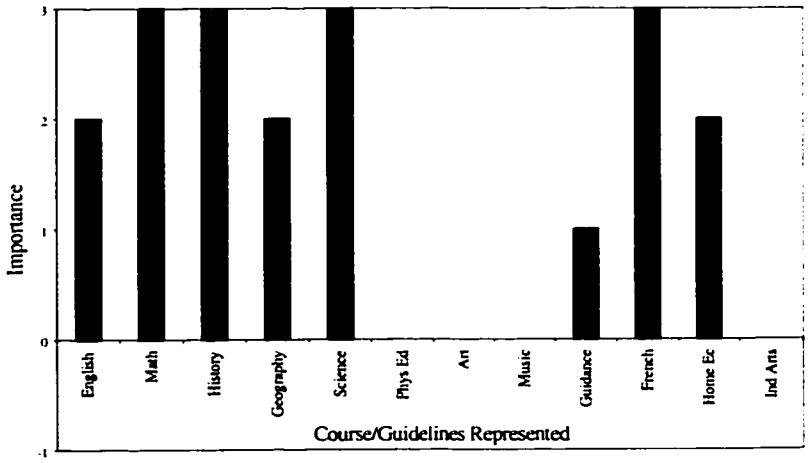
Figure 4.1 - Elements Used During Integration (Dimension A) in Period 4

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 4

Content

Throughout this period a deluge of new content was introduced into almost all core subjects. The reasoning behind this phenomenon is best expressed in the revised Mathematics guideline. The authors explain that due to the "great explosion of knowledge" in mathematics, and its contribution to all related fields (such as chemistry, physics and biology), it is now necessary for all students to understand newly discovered facts just to be functioning members of the new "mathematized culture" (4E-1). Furthermore, it was explained that students needed more than simple illustrations that relate to their own situation (4E-4).

Figure 4.1.1 - The Importance of Content in Period 4



> Applications find their place as examples of mathematical principles, rather than as separate topics (e.g. profit and loss). This procedure is an outgrowth of the realization that, in rapidly changing times, applications which are important today may be unimportant a few years hence. The object is, therefore, to educate the student so that he understands the basic principles and can make whatever applications are appropriate to his time. (4E-5)

This belief is mirrored in the new Science course, which was constructed around abstract principles rather than concrete "practical intelligences" with the hopes that the students will be able to transfer the knowledge to any situation (4C-2, 4C-22).

Other subjects follow this trend. The French teachers' prime responsibility is clearly layed out in the guidelines: they are to strongly encourage students to take part in an "organized effort to the mastery of a restricted body of material" (4H-11, see also 4H-13, 4H-15, 4H-16). Student interest no longer plays a part. Rather, a great importance is placed on the "over-learning" of language structure and vocabulary

(4H-14). Similarly, in the authors of the History and Geography sections endeavour to widen and deepen the body of knowledge that must be transmitted to the student (4A-6). Accurate facts must be brought into the class in a succinct, logical manner, each grade building the picture for the next, avoiding overlap or repetition (4A-7, 4A-9 to 4A-12, 4D-22, 4D-41, 4D-43, 4D-6, 4D-14), for "...without them students cannot understand and establish relationships, nor can comparisons and deductions be made" (4D-7).

Because of the enormous pressure this new information puts on the timetable, the Department recommends to schools that changes have to be made to accommodate this. However, little mention is made about how the new content can be integrated across subject areas. Rather, the new material will be dealt with in two ways. First, much material that was deemed as obsolete will be removed from the Grade 7, 8 courses (4E-5) and replaced with the new knowledge, freeing up later grades for more advanced work (see in Math 4E-2, in Science 4C-3, 4C-4). Secondly, the Department recommends that teachers transmit the information more efficiently (4E-3) by ensuring no "unnecessary repetition and the resultant waste of class time" (4C-7). Experiments that used to be largely driven by student interest (and took as long as the student needed) are now replaced by a more rigorous training in the scientific approach. Teachers take students through a number of pre-tried experiments with limited variables to show concretely how the principle works in practice, yet not take much time to do it (4C-6, 4C-18). Some Math/Science connections are made to Home Economics (4F-3, 4F-5, 4F-6), but otherwise, these two subjects rarely go beyond their field boundaries. It is made quite explicit that all subject teachers were given their own discrete package of information and had the primary responsibility of disseminating this material to the student (4B-5).

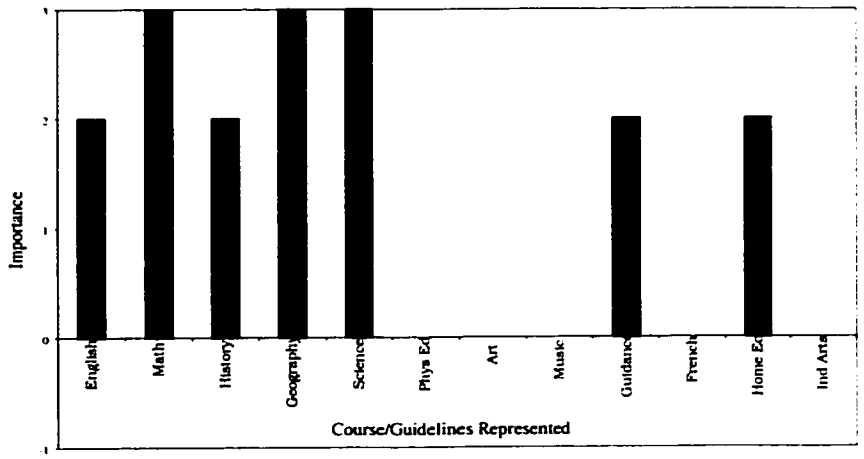
Academic Skills

Throughout this period, a new skill is introduced to deal with all the changes to content, and pervades much of the core curriculum. The "Scientific Approach" puts forth that all issues can be looked at in a scientific, objective manner, and that all problems can be solved through the use of logical steps and prescribed techniques. This can be seen not only in the Science course (4D-3), but in Geography

(4C-1, 4C-6, 4C-11, 4C-14), Home Economics (4F-6) and in history (renamed "Historical Attitude" the guideline views the work of historians as a pseudo-science that changes as new evidence is discovered - see 4A-2, 4A-4, 4D-23, 4D-28). Closely connected to this is a renewed emphasis on Math skills, although it is only explicitly mentioned in Math (4E-1, 4E-6), and Home Economics (4F-5)

Stemming from these two approaches is a demand for accuracy, neatness, precise mapping/diagram skills, excellent note-taking abilities and good study skills. This can be seen more widely scattered across the curriculum (4B-7, 4B-9, 4B-10, 4D-32, 4C-8 to 4C-17, 4D-12, 3D-27). As noted, the English guideline was not changed from the original Curriculum I:1 and thus stands apart from the other subjects during this period. While reading and writing skills are promoted to a certain extent, most of the now-updated subjects seem to use these skills merely to get closer to the subject's specific end. Science and Math, for example, makes a break between "regular" English and the "scientific" language (see 4C-14, 4C-15, 4C-16, 4E-5).

Figure 4.1.2 - The Importance of Academic Skills in Period 4



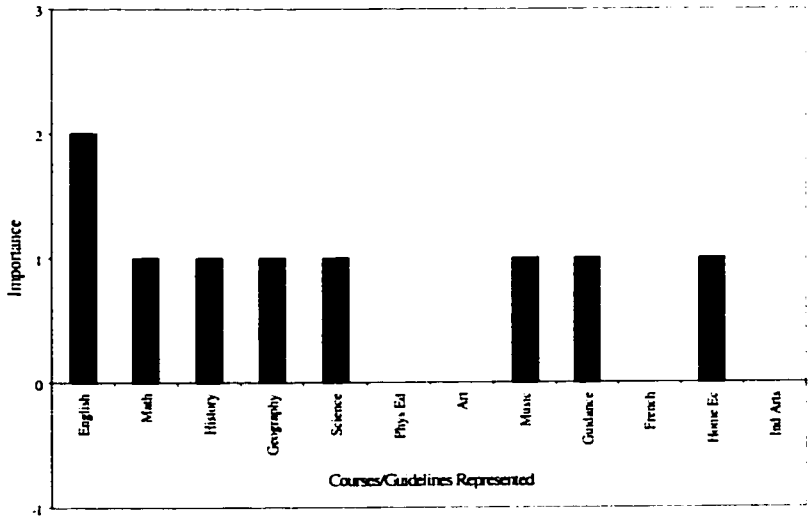
Practical/Manual Skills

Because of their new belief that "applications which are important today may be unimportant a few years hence" (4E-5), the Department made an effort to downplay any real-life situations. Rather than trying to get the students to reason inductively from situationally-learned instances, therefore, it encouraged teachers to transmit abstract ideas and principles, and let the students deduce their application as needed.

Scattered throughout the curriculum there are a handful of instances that make mention of

practical/vocational ends, but they are segregated into the courses whose prime mandate is to provide just such vocational training. The science course does make some mention of trying to teach students "the ability to do simple tasks which require a knowledge of practical science in home, in the garden, and on the farm" (4C-1). However, this seems a pale vestige of past programmes, as few examples of this aim are borne out in the actual Science units (4C-18, 4C-22). Guidance also echoes past requests that occupational uses should be mentioned in each subject area (4B-5) - short responses are found in Math (4E-1) and Science (4C-1). In Home Economics, while many vestiges of practical application still remain (4F-4, 4F-5, 4F-6), the authors do make a concerted effort to downplay the vocational/manual aspects in return for drawing itself closer to other scientifically-oriented courses.

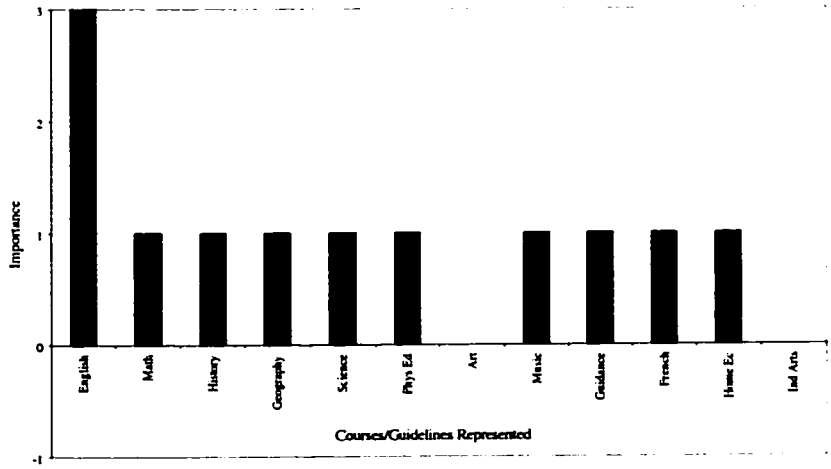
Figure 4.1.3 - The Importance of Manual Skills in Period 4



Social Skills

Almost all remnants of the active, participatory almost free-wheeling form of social skills promoted during periods 1 to 3 have now disappeared. There is fleeting mention in Guidance (4B-7) and Music (4I-8) that teachers and students should create a certain "esprit de corps." However, outside of that, little mention is made of any

Figure 4.1.4 - The Importance of Social Skills in Period 4

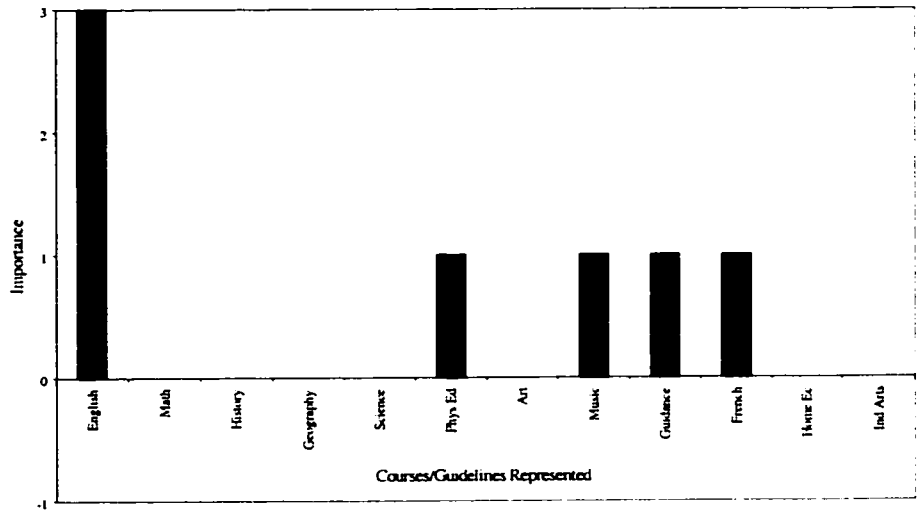


social interaction between students, and even then it is recommended that it be highly regulated by teachers (4B-7, 4D-29, 4C-13, 4G-3). Social skills, to the Department during this period, had much more to do with the creation of loyal citizens, an increased appreciation of social problems and differences, and a preparation of the students for their future societal responsibilities and work (4C-1, 4D-4, 4D-9, 4D-29, 4E-1, 4F-1, 4G-7, 4H-4, 4H-6).

Individual Development

Like Social skills, the past concepts of individual development appear to have become almost totally irrelevant to the creators of this period's curriculum. Rather, in the rare instances where any mention of personal growth is made, it is always done so in connection with societal approval. For example, Guidance links a person's intrinsic worth to future employment and study habits (see 4B), Home Economics discusses how a girl will eventually be expected to take up her "social responsibility" (see 4F), and Physical Education's explanation for fitness and grooming is inextricably bound to social acceptability (see 4G). Outside of this, there is very brief mentions of "lifelong learning (4C-17, 4D-22, 4E-4), but nothing more. Only Music aims at promoting the spiritual and emotional development as well as the intellectual in the student (4I-2, 4I-3).

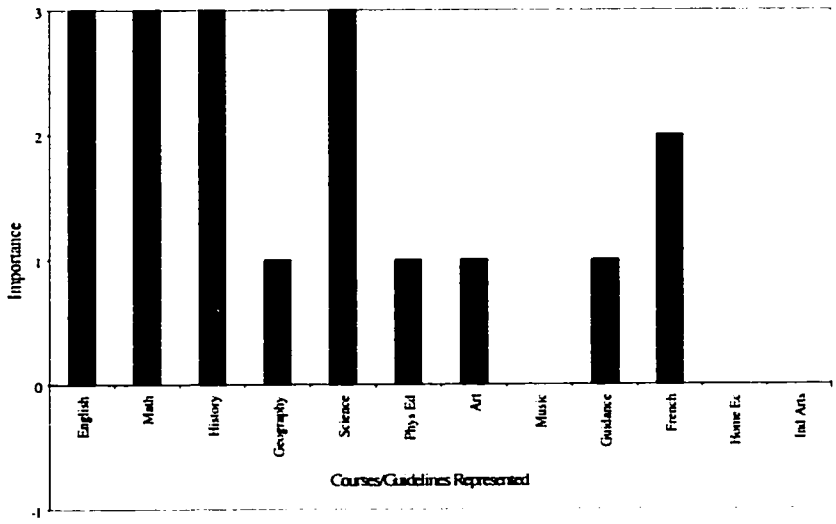
Figure 4.1.5 - The Importance of Individual Development in Period 4



Underlying Principles

Throughout the specific guidelines of Science (4C-1, 4C-6, 4C-11, 4C-14), Math (4E-1, 4E-4, 4E-6), Geography (4D-3) and History (4A-2, 4A-4, 4D-23, 4D-28) a deep belief in the powers of the Modern Science prevails. Each one entreats teachers to inculcate the spirit of experimentation and inquiry. However, this is not the child-like wonder inquiry of the earlier periods, but one based on objectivity, logic, and rationality - objects are now supposed to be observed with a detached eye. Similarly, in recording the experiment a scientific attitude must be maintained and bias must be eliminated for the student to view the subject in proper perspective (4C-11).

Figure 4.1.6 - The Importance of Underlying Principles in Period 4



Although much overwhelmed by the newcomer principle of Scientism, the Department's belief in the benefits of the democratic process still maintains some stature. However, each subject's relationship with the democratic process is limited to brief (and fairly passive) commentary in the introductory paragraphs of each respective guideline (4C-1, 4D-4, E-1). Only history entreats teachers to actively participate in learning about democracy (4D-29, 4A-4). Increasingly, rather than exerting the democratic, melting-pot philosophy, however, the Department entreats teachers to inculcate in students more of an acceptance of Social/Cultural Diversity (4B-2, 4D-9, 4G-3, 4H-4, 4H-6).

Lastly, Conservation continues to be an important area of study but, apparently for the sake of efficiency, has been relegated solely to the Science (4C-20) and Geography (4D-15, 4D-16) sections.

High Priorit	writing (4C-15, 4C-16). Points out contact with Agriculture when necessary (4C-20) -History and Geography separated, into precise areas of interest. They may run parallel when possible (4D-27) but will force a fit (4D-45). Geography related to other appropriate areas, i.e. Conservation (4D-3, 4D-15). -Math must take its rightful, high place (4E-1). It cannot be integrated, and must be efficient in its teaching. Integrate Math topics but not outside the field. (4E-3) -Other courses fit scheme: Home Economics between Arts & Sciences (4F-5), Phys Ed in relation to other areas of the curriculum (4G-3), Health should not be isolated but taught across the curriculum (4G-6, 4G-10) Subject are to be taught in a unified progression over the grade levels, known to unknown. (4C-7, 4G-6, 4D-23 to 4D-26)			Change math at school to prepare students to live in "mathematized culture". (4E-1 to 4E-6) Home Ec must reflect changes in automation and social demands (4F-2, 4F-3). French and Phys Ed to promote understanding of other cultures. Bilingualism now important. (4H-4, 4H-6, 4G-3)
Medium			All student work is quite passive: -History - look clearly at our country (4A-3, 4A-4) -Guidance - favourable attitude to work (4B-9, 4B-10). -Aims of Science, Geography, History, Math are to promote the growth of a pupil to fit into democratic society, think about social, environmental problems (4C-1, 4D-4, 4D-15, 4D-29, 4E-1) -Health to keep society gain steady growth in hygiene, etc (5G-7) -Music unifies the school (4I-8) -Home Ec helps pupils understand the contribution of the family to the social and economic stability of society. (4F-1, 4F-2, 4F-6)	
Low		Guidance - while each child has intrinsic worth (4B-2), they are individuals with problems (4B-4) & find solutions. (4B-7). French - try not to make drill too monotonous and interest the children (4H-10, 4H-11, 4H-14, 4H-16) Music teacher must guide the student to enjoy musical experiences for its own sake (4I-2).		
Negligible (0)		By and large, students do not figure into the equation. School's purpose is to disseminate knowledge efficiently. Student control would impede. -Experiments in Science are predesigned and are to be merely reenacted by the student (4C-13 to 4C-22). -In Geography & History, teacher should carefully guide the students to the proper ends (4D-4, 4D-8, 4D-9, 4D-28, 4D-31). -Highly regulated discovery approach in Math (4E-6). -Student choice eliminated from Home Economics (see 4F). -Folk dancing promoted in Phys Ed for culture benefits (4G-3)		

Figure 4.2 - Objectives of Integration (Dimension B) in Period 4

High Priorit	subject teacher are now given scheduled blocks of time (see 4B, 4G) The Ministry-issued guidelines presented the aims, organization, methodology, and topics for each course. Notebooks, an important new method, were mandatory; topics were, in most cases, not open to change. (4A-9 to 4A-12, 4D-12, 4C-8 to 4C-10, 4D-45, 4E-5, 4F-8, 4H-9) Texts were chosen at this level and optional books, museums, and films were recommended. (4A-8, 4D-34, 4D-37) Inspectors are given training by Department to more efficiently train the teachers (4E-10 to 4E-14) Therefore, this curriculum was largely directed by the Ministry				knowledge in the field (4A-6) Teachers can modify curriculum in History depending on text-book availability (4A-7) Teachers should be familiar to earlier and later course outlines to see where they fit in (4C-5 to 4C-7, 4D-23 to 4D-25, 4F-7)
Medium (2)					
Low (1)		Boards can choose to allow French to be taught within its jurisdiction (4H-1)	Health committees (4G-10)	Principal and librarians to coordinate with teachers additional readings in History (4D-36) Principal can decide when to introduce topics in mathematics (4E-) Guidance teacher gives esprit de corps to the school (4B-7) Schools should supply the resources or be ingenious at supplementing (4C-6) Little cooperation between teachers mentioned.	
Negligible		Otherwise, little mention	Local Committees can develop own courses in Social Studies to replace History & Geography, but had to conform to Department specifications (4A-7)		

Figure 4.3 - Loci of Integration (Dimension C) in Period 4

	Completely Horizontal	Down Vertical	Upwardly Vertical	Completely Vertical (Grade 7 & 8 seen as part of complete education with no breaks)	Insular vertical (Grade 7 & 8 linked but seen as a separate entity from elementary & Secondary)
High Priority (3)					A visible intimation that Grades 7 & 8, Grades 9 & 10 should be grouped together, the latter referred to as "higher grades". (4C-7, 4D-24 Guidance pinpoints Grades 7 & 8 as time for group guidance. They have age specific problems. (4B-6, 4B-10) Mathematics just has guidelines for 7 & 8 (4E) History sequential from 7 to 8: Canada (to 1800; 1801-1900). Not so for later grades (4D-24 to 4D-26) For the time, French optional in 7 & 8 but will eventually expand further into other grades. (4H-2, 4H-3)
Medium (2)	Certain topics must be taught at certain grade levels and certain subjects have separated guidelines, i.e. History, Math, French. (4D-45, 4E-10, 4E-15, 4H-1, 4H-3, 4H- 17)		Subject areas still group Grades 7 & 8 as part of new Intermediate Division. See Science (4C-7, 4C-19 to 4C-22), History (4D-22 to 4D-27) and Geography (4D-45), Music (4I). Grade teachers should be familiar with the guidelines of other grade levels (4C-7)		
Low (1)		Some links to lower grade levels, i.e. in History(4A-9), Phys Ed (4G-1, 4G-8) and French (4H-3)		Although Science still says it is providing training for students who will leave at Grade 10, (4C-2) Home Economics cut off from higher, vocational courses (4F-4) Some discussion about going on to university, but also downplayed (4D-31) Guidance counsellors must see changes in students from PJ to Intermediate (4B-4) Health should be seen as a continuous program from Kindergarten to Grade 12 (4G-6) French course admits hard to link elementary and secondary programs, but proposes that a continuous one be created between grades 4 and 9 (4H-2, 4H-3) Music should link all grade levels at one school (4I-8) Many changes largely driven by move to transmit knowledge downwards to lower levels so better prepared for University. (4C-3, 4C-4, 4C-5, 4D-22, 4E-1 to 4E-3)	
0					

Figure 4.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 4

Fair Deg		French - implementation left to discretion of boards (4H-1)		Economics (4F-7), Phys Ed (4G-1)			(4D-33)			
Vague Evidence (1)	History & Geography links (4D-27, 4D-41). History promotes wider learning (4A-6, 4D-32, 4D-35). Social Studies allowed but difficult (4D-45) Home Ec links to other subjects (4F-5, 4F-6) Phys Ed – said to pervade, more continuity over grades, though (4G-3, 4G-6, 4G-7, 4G-8)		History - although says no division of time urges teachers to teach as much as possible (4A-7) Guidance - takes over personal problems - relieves others(4B-4, 4B-5)	Guidance - vague connection between teacher and counsellor (4B-5). Every teacher has responsibility, but mainly counselor - only he can create school esprit de corps (4B-7) Phys Ed, Home Ec - link to other subjects (4F-5, 4G-3, 4G-6)				Says learning for later educationally unsound (4D-31) But this is contradicted below. Home Ec - just for general knowledge, not for later voc training (4F-4) French - hoping to make a continuous program into secondary (4H-2, 4H-3)		If lacking space & equipment for new Science - improvise. (4C-6) Geography teachers should be imaginative - visuals (4D-5, 4D-10)
No Evidence (0)	No evidence in Math, French or Music Science – says that each subject has a separate method, language (4C-15, 4C-16) Social Studies broken into History & Geography (4A-1, 4D-1). Says less unity inevitable Guidance should take over this role (4B-4, 4B-5)	No mention of time frame for Home Economics, Phys Ed, Guidance, Science, Music	No mention made in Science, Geography, Home Ec, Phys Ed, French, Music	No mention made in Geography, French, Music	No indication	This problem not realized or mentioned in Home Ec, Phys Ed, Music History & Geography inhibits much cross-over (4D-27, 4D-45) Special course dedicated specially to history (4A-1), content must be covered (4A-7, 4D-30), specialized text (4D-34, 4D-36) Guidance concedes that course work should specialize (4B-4), group work should be given special time-slot and areas (4B-6, 4B-7), Math & Science - special time, place, etc warranted (4C-6, 4E-3) French – difficulty making links with other courses (4H-2)	Guidance tests seem to be standardized (4B-3)	prepare students for later techniques in the secondary system. See History (4D-22 to 4D-26), Science (4C-2, 4C-4, 4C-5, 4C-7), Math (4E-2, 4E-4, 4E-5) Guidance - specialization, streaming expected as go higher (4B-4, 4B-9)	No indication	

Figure 4.6 - Awareness of Implementation Impediments (Dimension F) in Period 4

	Prof. Dev.	Add'l Res	Parent	Community	Board	Principal	Role	Teacher	Adaptability	Open Policy	Student
Actively Provides (3)											
Actively Encourages (2)	Departmental in-servicing for inspectors (4E-10 to 4E-14) Concedes teachers may need additional training for new Math. (4E-11)				Board has power to approve local consultative committee for Health (4G-10) Board can choose French option (4H-1)	New Math introduced by Principal, based on need for teacher preparation. (4E-10)			History - originally as alternative (4A-1) Home Ec -sequence left to teacher (4F-8) Asserts no standard method for teaching history. Encourages adaptations. (4D-31)		
Passively Encourages (1)	Teachers to self-prepare for History –expects a wider & deeper knowledge than their students (4A-6, 4D-30, 4D-31, 4D-35) 1964 notes re. New Math: hint that in-servicing should be a key role of a decentralized system (4E-13)	History gives references to books that can help teachers. (4D-36) Adjustments for local needs as long as allocation for science periods. Encourages improvisation for equipment. (4E-6)	Tests parent reaction to New Math (4E-14)	Encourages cooperation between teachers/principal and local health agencies, PTA members (4G-10) Geography class can look at local conservation actions (4D-16) History can look at local community displays (4D-37)	Will they get more in-servicing, etc responsibilities for Math? (4E-13)	Principal can recommend suitable reading for History (4D-36)		Tests teachers, etc. reaction to new math (4E-13, 4E-14) Support from teachers = diagnosis and sending them to counsellor (4B-4, 4B-5) Health committee (4G-10)	Provision for Social Sciences instead of History & Geography (with limitation) (4D-45) Science - some flexibility but must keep strict timetable, etc (4C-6) New Math has flexible introduction (4E-10)	Additional reading in History chosen by teachers, or administrators (4D-36) Social Studies can be created by local committees (4D-45) Math inspectors, teachers, students give feedback to new course (4E-10 to 4E-14) Health program has local committee (4G-10)	Students are tested for reaction to New Math (4E-14)
No Evidence (0)							No Mention	Mostly, teaching is considered a fairly solitary business. Due to specific design of curriculum, less interplay of teachers needed (4A-7, 4D-36)			Students have no input into projects or selection of topics in any new courses. (see 4H-1 as a example) Guidance sees student as "individual with problems"; assess by records, tests, teacher's observations, case studies. (4B-4)

Figure 4.7 - Factors for Assisting or Impeding Curriculum Integration Implementation (Dimension G) in Period 4

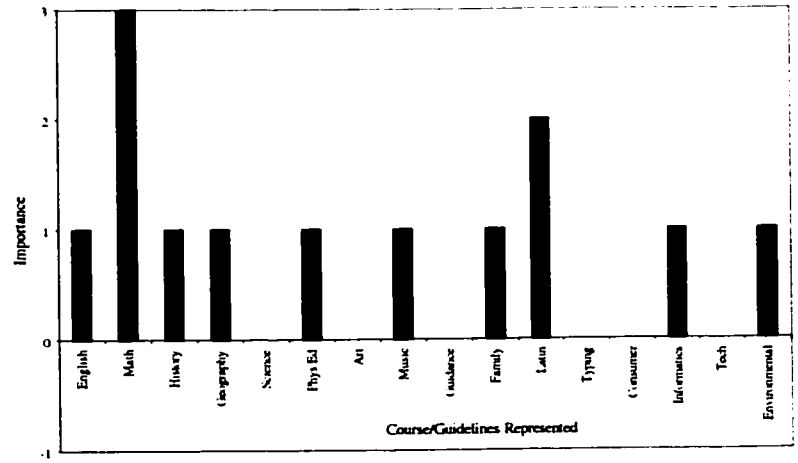
	Content	Academic Processes	Practical/Manual Skills	Social Skills	Individual Development	Principles
High Priority (3)					Develop self-confidence, personality, initiative, positive attitudes - in short "total personality (5A-1, 5A-4; 5A-6; 5B-1; 5B-2; 5C-4; 5I-20; 5I-21; 5I-24; 5L-4; 5O-1, 5O-2) in Art (5B-1, 5B-2, 5B-11) in English (5C-3, 5C-4, 5C-5, 5C-7b, 5C-12) in Science (5I-5, 5I-11, 5I-16, 5I-16a, 5I-17a, 5I-19, 5I-20, 5I-21, 5I-24, 5I-25) in Environmental Science (5N-1, 5N-3, 5N-5) in History (5L-4, 5L-4a, 5L-5) and in Family Studies (5O-1, 5O-2) Accommodate individual levels of development (5A-2; 5B-1; 5B-2; 5C-3; 5C-4; 5I-25; 5L-5; 5N-1) in Phys Ed (5P-1, 5P-8, 5P-9)	Student-Directed & Interdisciplinary Education (5I-1; 5I-2; 5I-19; 5J-1; 5N-2) Flexibility & Adaptability: related to technological revolution (5F-1; 5G-1; 5G-2; 5H-1; 5H-4; 5H-5, 5H-7, 5H-8; 5L-2, 5I-1, 5I-2, 5I-13b, 5J-1, 5N-2?) Cultural awareness (5B-9; 5C-6; 5K-3; 5K-4; 5L-1; 5L-2; 5L-3; 5L-4a, 5L-10, 5M-4; 5O-1, 5P-10, 5K-3, 5K-4)
Medium (2)	Latin takes content from other subjects (5D-2a, 5Dc, 5D-1, 5D-3a, 5D-4, 5D-4a, 5D-4c, 5D-4d, 4D-4e)	Research, study skills (5A-6, 5M-5, 5G-5, 5L-4, 5L-4a, 5M-5) Science, tech skills (5D-4, 5I-6, 5I-14, 5G-5, 5J-2, 4I-4, 4I-5, 4I-6, 4I-14, 5I-10, 5I-13c, 5J-1, 5J-2, 5J-2a, 5K-3) Language skills (5C-3, 5C-4, 5C-5, 5C-9; 5D-2, 5D-2, 5D-4a, 5D-4c, 5D-4d)				
Low Priority (1)	Content seen as a stepping stone for larger meaning (5G-3, 5G-4, 5G-5, 5G-5b, 5G-7, 5I-22, 5I-23) Use just enough content to get by (5I-5, 5I-10, 5N-3). Content placed in larger concepts, themes (5C-9, 5C-10, 5I-27 to 5I-31,5L-9, 5O-6) Overlapping content links 2 or more subjects (5H-5a, 5K-5, 5L-6?, 5M-2, 5M-3, 5N-2, 5P-6)		Hands-On (i.e Arts & crafts, dance) (5B-11, 5C-6), 5D-3a, 5I-15, 5L-13, 5O-7, 5P-10) Relevance, Real-life outings, problems & activities (5C-11, 5C-14, 5F-2, 5G-2, 5G-5b, 3G-6, 5H-7, 5H-8, 5H-9, (5I-10, 5I-16, 5I-33, 5J-4, 5N-3, 5P-11, 5P-15) Vocational, recreational (5A-1, 5A-5, 5A-6, 5A-11)	Relate to others - share ideas in a group (5A-6; 5B-3, 5C-4, 5C-8, 5K-1; 5L-7, 5P-16) Individual & society - your place, making social decisions, contributions, how to survive in society (5A-1, 5A-2, 5A-5, 5B-3; 5G-1, 5H-4, 5H-6, 5H-7, 5H-9, 5I-10, 5L-4; 5M-5, 5N-5, 5O-1; 5O-2, 5P-8)	Informatics allows student to discover his interest (5H-2) Latin discusses issues of free will (5D-2a, 5D-3) Music engages student's emotions (5K-7)	Morals, Attitudes & Values mentioned (5D-3; 5L-8) English discusses classic literary heritage (5C-6)
egligible (0)	Content not mentioned in Guidance, Tech Science, Typing Content de-emphasized , belittled throughout. Always subsumed to pupil's needs and educational process.	No mention in Art, Environmental Science, Family Studies, Phys Ed, Informatics , Typing	No mention in Music, Geography	No mention in Latin, Typing, Tech Science	No mention in Typing, Consumer , Geography , Tech Science	No mention in Guidance

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 5

Content

In a dramatic reversal from the previous period, almost all subject areas downplay the use of content to educate students. Ranging from mild forbearance to veiled hostility, the documents continually warn teachers about the hazards of losing sight of important concepts and pupils' needs in a sea of minutiae (5G-3, 5G-4, 5I-5; 5L-9).[1] As such, it is recommended that the minor amounts of factual information included in each guideline should not be seen as subject specific, but spread around the entire curriculum wherever needed to reinforce meaning, spark interest, and show the interconnectedness of the learning process (5H-5a, 5K-5, 5M-2, 5M-3, 5O-6, 5P-6). It was actually left up to individual teachers to decide on which specific information, details, and facts were to be included and which were not. Teachers were also given the prerogative of deciding on which method should be used to bring this mass under control, although most guidelines heartily endorsed the thematic approach (5C-9, 5C-10, 5G-4, 5G-5, 5G-7, 5I-22, 5I-23, 5I-27 to 5I-31, 5L-9).

Figure 5.1.1 - The Importance of Content in Period 5



The one outlier in this period is *Latin and Greek*, which views content as having some definite uses. History content (5Dc, 5D-1, 5D-3a, 5D-4c), excerpts from literature (5D-2a, 5D-4a), and facts from technology and health (5D-4, 5D-4d, 4D-4e), are all seen as valuable assets in helping to fill in a picture of Ancient Rome and Greece for the students.

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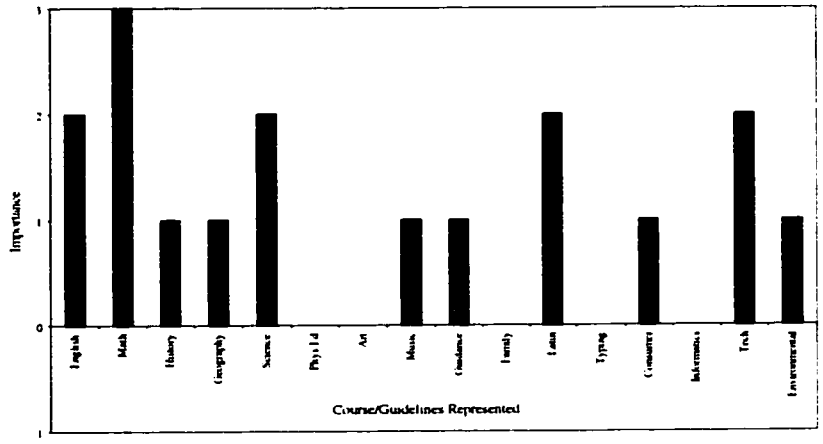
[1] In Art, teachers are specifically requested to keep the content and subject matter as flexible as possible unless the students specifically ask for it (5B-9b). Art is perhaps the most vehement, as it abandons any formal teaching of Art History stating that it was too formal, and employed memorization as the chief means of teaching (5B-5, 5B-8, 5B-9). Consumer Studies, as well, states it preference for logical advice rather than the use of any facts in the teaching of wise consumer spending (5G-3).

Academic Skills

In studying the Department's handling of academic skills during this period, the researcher must be attuned to the differences between the rhetoric and the reality of the documents. The overall illusion promoted throughout the documents is that academic skills are interconnected. The English guideline, for example, makes an impassioned argument to teachers that the study of language must be viewed as a process, not a subject. It therefore advocates the linking of contexts, blurring of subject lines and the creation of a unified English program (5C-4, 5C-5, 5C-9). However, this discourse is only incidentally transmitted into concrete terms throughout the curriculum beyond the English section. Any references to the study of English, let alone "Interdisciplinary planning" (5C-9), only appears in Latin (5D-2, 5D-4a, 5D-4c, 5D-4d), and to a lesser extent History (5L-4, 5L-4a), Music (5K-3), and Science (5I-10, 5I-13c). Similarly, while the "scientific approach" is given nodding approval by a handful of subject areas (5D-4, 5G-5, 5L-4, 5L-4a, 5M-5), the true learning of this skill seems to be downloaded to Science itself and newly created satellite courses (see Environmental Science [5N], and Man, Science and Technology [5J-1, 5J-2, 5J-2a] for specific skills). Even the generic "study skills" has become ghettoized into Guidance (5A-6), rather than being reinforced across the curriculum.[2]

Figure 5.1.2 - The Importance of Academic Skills in Period 5



Accompanying this trend is a general broadening of the definition of these skills. English skills, according to the guideline, no longer should be considered merely proficiency in reading and writing skills - equal importance should be given to the expressive aspect of the English language, including such activities as drama, film-making and other visual forms (5C-3). Scientific skills also expands to include

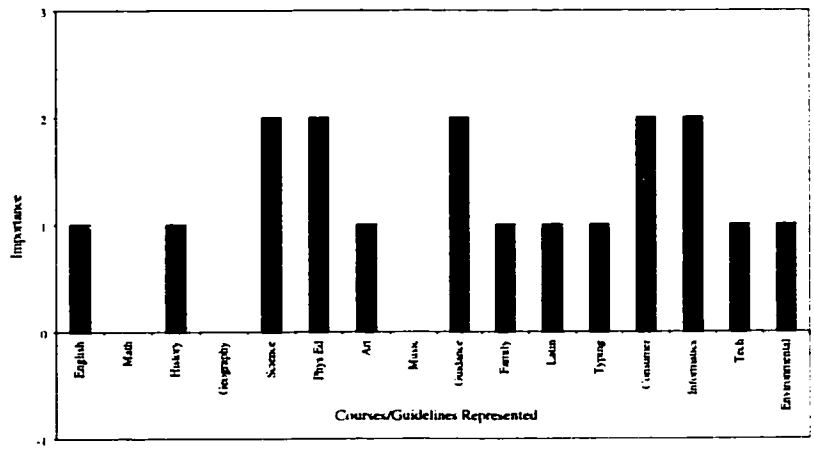
[2] It is only mentioned briefly in History (5M-5).

such descriptors as objective description, inference, analysis, generalization, prediction, interpretation, application, judgement and synthesis classifying, observing, discriminating (5I-6; 5I-14; 5G-5; 5J-2, 4I-4, 4I-5,5I-10, 5I-13c).

Practical/Manual Skills

After an extended hiatus, Practical/Manual skills make a quiet reentry into the curriculum. Renewed mention is made of the utility of "hands-on" activities, albeit most references are dealt with in a fairly offhanded manner. English (5C-6), Latin (5D-3a), Family Studies (5O-7), and History (5L-13) all advocate the use of painting, sculpture, pantomime and model-building as a way to interest students in the subject. Only two subjects, however, genuinely give this aspect more than a passing interest. Predictably, Art places great emphasis on the "simple skills" (5B-11), including a variety of manual, artistic pursuits ranging from drawing & painting to print-making, ceramics, and weaving (See the section in 5B). However, this does fall within its mandate. The second subject is Science, which promotes a great deal of hands-on experimentation (5I-15) in a natural setting (5I-16). As in the last period, "vocational training" as well as hobbies (5A-1, 5A-5, 5A-6, 5A-11) become the bailiwick of Guidance.

Figure 5.1.3 - The Importance of Manual Skills in Period 5



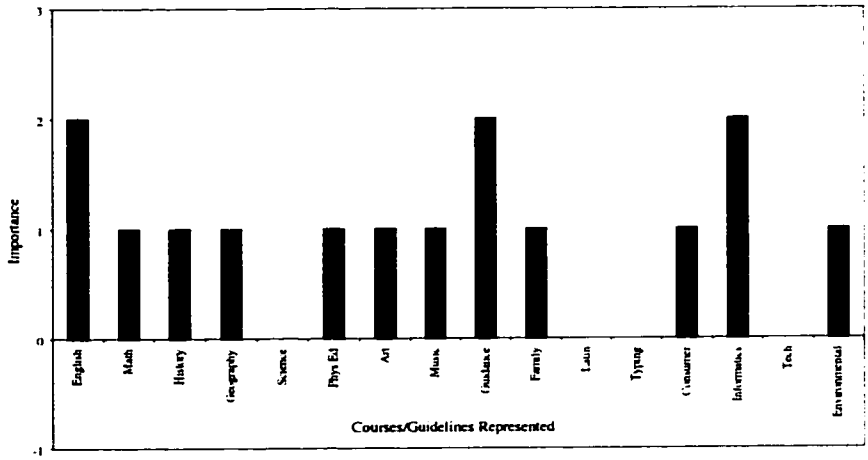
The definition expands in this period past mere "hands-on" and "vocational training" to re-encompass "real-life situations". In fact, the term "Relevance to the Student" is frequently, if vaguely, used throughout most guidelines. Consumer Studies, for example, recommends that real-life topics (i.e. the marketplace) be integrated into school (5G-2, 5G-5b, 5G-6), while Informatics entreats teachers to

look at the relevance of computers on student's lives (5H-7, 5H-8, 5H-9). Likewise, Physical Education tries to show how exercise and dance can be integrated into daily life (5P-10, 5P-11, 5P-15). Other courses tend to deal with the issue of relevance in one way - the Field trip (5C-11, 5C-14, 5I-33, 5J-4).[3] Therefore, this element may have made a renaissance in this period, but it still remains of secondary importance.

Social Skills

Almost every course states briefly that its mandates include looking at the students' position in society, community values, and how to live and work in the modern world (see History [5L-4], Geography [5M-5), Environmental Science [5N-5], Family Studies [5O-1, 5O-2] and Physical Education [5P-8]). However, beyond these statements, the curriculum does not exhibit the participatory intensity of "the Enterprise Method" seen in Period 2, nor does it promote the rigours and responsibilities of citizenship to the extent of Period 3. Group work is mentioned only once in Art (5B-3), English (5C-8), Music (5K-1), History (5L-7), and Physical Education (5P-16), while "citizenship training" is left in the most general of senses. If fact, any mention of society at all is relegated to a tentative phrase or two. This can be seen in Art's "broader context" (5B-3), in English's discussion of the human need for communication (5C-4), and in pointing out how students can maneuver the economic (5G-1) and information laden world around them (5H-4, 5H-6, 5H-7, 5H-9). Science, goes one step further - it makes only makes one

Figure 5.1.4 - The Importance of Social Skills in Period 5



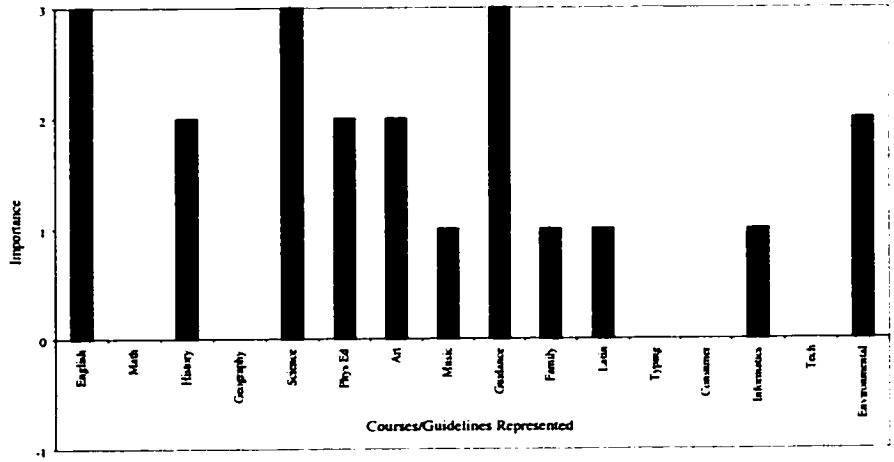
[3] Typing goes one step farther - students are to go outside the classroom for realistic typing assignments (5F-2).

reference to society and then states that "we live in a science-oriented society..." (5I-10). Otherwise, no more is mentioned. Even in Guidance, the course specifically devoted to this subject, social skills are only briefly mentioned (5A-1, 5A-2, 5A-5, 5A-6) and then subjugated to a unit discussing "You in Society". In short, though lip service is given to the area of Social Skills, in many cases, the Department seems to leave any concrete development of this element up to the teachers (or perhaps to ignore this facet of a student's education as altogether too problematic).

Individual Development

Summed up neatly in the Science guideline, Individual Development appears to become the raison d'etre of education for the Department during this period: "...All subjects in the school curriculum serve a common goal. The development of character and personality, of attitudes and skills, of aptitudes and interests is a fundamental goal that transcends in importance the learning of specific subject content" (5I-5). Shot through the whole curriculum is this genuine desire to give students wide freedom to pursue personal interests, even beyond the scope of subject activities, in an attempt to "know themselves" (5A-1, 5A-2, 5H-2, 5P-9). Again, Science makes this argument explicit - "with today's emphasis on the development of the total personality, it would seem that as much attention should be given to the wide individual differences in emotional reactions as to those in physical and intellectual development (5I-24). As such, the guidelines give very wide boundaries of what the subject actually entails (5B-1; 5B-2; 5C-3; 5C-4), and instruct teachers to adapt their teaching styles accordingly to

Figure 5.1.5 - The Importance of Individual Development in Period 5



recognize individual differences (5I-25). The reasoning is explained in English that "a considerable volume of current research, however, indicates that a student will learn best, not by sequential drill in isolation, but through his own awareness of his needs (5C-5). Only then will they become independent learners and thinkers (5I-19, 5I-20, 5I-21, 5I-24, 5I-25).

Each subject tries to make a concerted effort to emulate this philosophy by using subject-centred activities as tools to reach the student's personal objectives. Art, for example, tried to teach the student how to gain self-confidence and self-expression through artistic endeavours (5B-1, 5B-2, 5B-11). Aesthetic satisfaction is also mentioned in Science (5I-17a) while creative writing is seen by the English guideline as an outlet of expression (5C-3, 5C-4, 5C-7b, 5C-12). Music's engages the students' emotions (5K-7), and Latin can be used in the students' general discussion of free will and values (5D-2a, 5D-3). History says it will, through the systematic investigation of the past, teach students how to weigh evidence, come to conclusions, and recognize bias in people's actions: " In short, he will be developing decision making abilities important for his personal life..." (5L-4). Furthermore, it mentions that the study of historical characters will encourage noble human traits in the student - dignity of labour, individualism, imagination, and empathy (5L-4a, 5L-5). Lastly, Family Studies has a role to play - that of helping students deal with breaking away from the dependence on the family unit and developing a personal values system (5O-1, 5O-2) – a far cry from the "happy homemaker" mandate of the previous guideline.

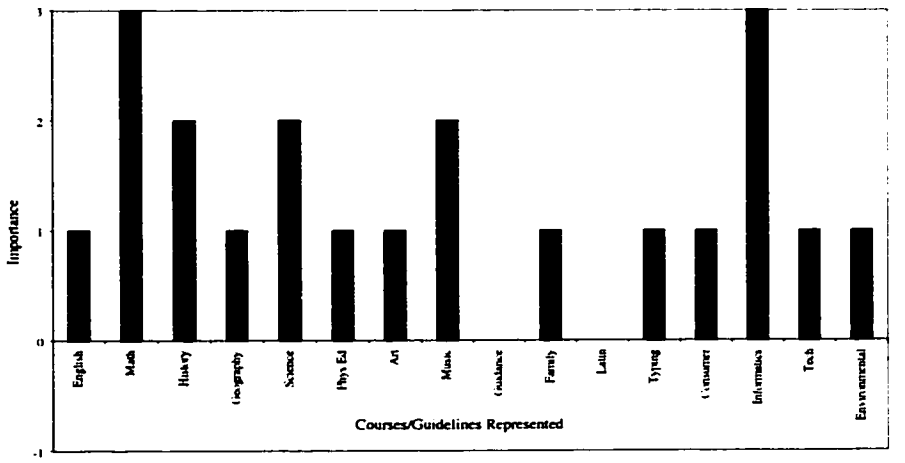
Underlying Principles

With the great accent on personal freedom and student-centred initiatives,[4] it stands to reason that underlying principles lost a great deal of intensity during this period. Even the most politically correct principle of the time, the promotion of Cultural Awareness, was still quite thinly spread out among the various guidelines. While it is true that History focused a great deal of the course on the importance of cultural awareness (5L-1, 5L-2, 5L-3, 5L-4a, 5L-5, 5L-10), most other courses give it only a passing

[4] Which is, perhaps in itself, an underlying principle.

acknowledgement. In examining the various course excerpts, there also seems to be little unity of definition as to culture in Canada. It ranges from a traditional view of heritage in Art (5B-9) and English (5C-6) to the perspective that more cultures should be reflected in Music (5K-3, 5K-4), Family Studies (5O-1) and Physical Education (5P-10). Perhaps as the most important bellwether to future periods, Geography even promotes a view of culture in line with the Marshall McLuhan vision of the Global Village (5M-4).

Figure 5.1.6 - The Importance of Underlying Principles in Period 5



Held over from the previous period, certain courses still promote a belief in the benefits of the modern scientific-technological revolution. However, this has dwindled in importance across the curriculum to retreat to Science (5I-1, 5I-2, 5I-13b) and the related courses of Science, Technology and Man (5J-1), Environmental Science,[5] Informatics (5H-1, 5H-4, 5H-5, 5H-7), and to a lesser extent Consumer Studies (5G-1, 5G-2) and Typing (5F-1). Rather than dwelling on any immediate benefits on society, however, the Ministry now simply states that the constant crush of new information and techniques will force new courses to become more flexible and adaptable in the future. This mentality leads several courses to promote a fairly vehement belief in the benefits of interdisciplinary forms of education (5I-1; 5I-2; 5I-19; 5J-1; 5N-2).

[5] Environmental Science (an update of Conservation) tries to inculcate students to a way to live in harmony with surroundings (5N-1, 5N-5), and to develop a pattern of understanding the world (5N-3, also seen in science 5I-16).

High Priority (3)	Advocates specific approaches (5B-8; 5C-1; 5C-8; 5C-9; 5H-7; 5I-17; 5I-18, 5L-4a, 5P-2) Created 10 Regional Offices with consultants to help in planning and developing school programs, in-servicing (5C-15, 5I-18a, 5J-5, 5K-8, 5B-d) Reassessing, rewriting certain programs, methods taught in past (5B-8, 5B-10, 5C-2, 5C-3, 5C-5, 5C-9, 5C-14; 5H-7, 5I-2, 5I-9, 5I-17, 5I-18, 5J-2b, 5N-6 to 5N-7, 5O-2a)			5A-9; 5A-10); Art (5B-5, 5B-6, 5B-7, 5B-9a, 5B-9e); Latin 5D-b, 5D-3a, 5D-4, 5D-4a, 5D-4c); Science (5I-12, 5I-17, 5I-24, 5I-25, 5I-26); Environment (5N-2, 5N-4); Phys Ed (5P-2, 5P-4, 5P-5); Tech (5J-3); Consumer (5G-5a); Informatics (5H-6) Students have some power to cooperate in course construction or electives. See English (5C-10, 5C-13); History (5L-12); Geography (5M-6, 5M-7, 5M-8); Family (5O-3, 5O-4) But teachers are incited to change practice to department's methods. See English (5C-5, 5C-7a, 5C-7b, 5C-8) Music (5K-2, 5K-3, 5K-6, 5K-6a, 5K-8) Family (5O-6, 5O-6)
Medium Priority (2)			School personnel needed to plan, coordinate, implement programs. See Guidance (5A-2, 5A-3, 5A-8); Art (5B-1, 5B-2, 5B-9d); English (5C-7a, 5C-9, 5C-13); Informatics (5H-3); Music (5C-10); Environment (5N-1a); Phys Ed (5P-2, 5P-3, 5P-5, 5P-6, 5P-7, 5P-10, 5P-14); Tech (5J-4); History (5K-12, 5K-13); Geography (5M-3, 5M-6). Local curriculum committee involvement; autonomy. See consumer (5G-2, 5G-5b, 5G-5a); Informatics (5H-3); Science (5I-12, 5I-13b, 5I-18a, 5I-32) Phys Ed (5P-2, 5P-3) Typing (5F-2) Sharing of topics between teachers. See English (5C-10); Latin (5D-4, 5D-4a) Music (5K-2, 5K-5, 5K-, 5K-6a, 5K-7, 5K-8) Environment (5N2) Tech (5J-3) Family - can unify curriculum - vague (5O-6)	
Low (1)		Science options can have district plan (5I-32). Board may create a Tech course, but they must obtain permission from the Regional Office. Boards can interpret Phys Ed guide (5P-2)		
0				

Figure 5.3 - Loci of Integration (Dimension C) in Period 5

	Completely Horizontal	Downwardly Vertical	Upwardly Vertical (Grade 7 & 8 linked to higher grades)	Completely Vertical	Insular vertical
High Priority (3)			Intermediate Years (Grades 7-10) seen as a block (5B-6; 5B-8; 5B-6, 5B-8, 5B-9; 5C-1, 5C-4, 5C-6; 5C-7b, 5H-3, 5I-9, 5I-13b, 5L-a, 5L-5, 5L-7, 5M-4, 5M-6, 5P-9) Intermediate Years a link between Elementary and Senior (5G-5a, 5N-1a, 5L-5, Science, 1972) Guidance advocates block time-tabling to enable coordination between Grade 8 and Grade 9 programs and options (5A-8). Latin devolved for optional inclusion in grade 8; same for elective Business and Applied science programs (5D-a, 5G-2; 5H-3)		
Medium (2)				Theme approach "does not prescribe specific areas of study for specific grade levels" (Art, 1968). Science guideline defines place of science from K to 13. See education as a continuum from K-13 (5I-13). Science - a progression from elementary to Intermediate (5I-4) Phys Ed - PJ, Intermediate and Senior should form a continuum - dept head should coordinate (5P-3, 5P-13)	
Low (1)	Latin mentions definite courses for definite years - builds on one another (5D-4a, 5D-4b)				Guidance - groups Grade 7 & 8 students together (5A-5).
0	Otherwise, not applicable to this period.	Does not apply			Otherwise, does not apply

Figure 5.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 5

High Degree	English (5C-2, 5C-4, 5C-7, 5C-9, 5C-14); Consumer (5G-5a, 5G-5b); Informatics (5H-5 to 5H-8); Science (5I-2, 5I-4, 5I-5, 5I-7, 5I-17a, 5I-18, 5I-21, 5I-23, 5I-26, 5I-27); Technology (5J-2b, 5J-3, 5J-4); Music (5K-2, 5K-5, 5K-8); History (5L-13); Geography (5M-3, 5M-6); Environment (5N-1, 5N-2, 5N-4, 5N-6, 5N-6a); Family (5O-6, 5O-8); Phys Ed (5P-6, 5P-10, 5P-14, 5P-15)					developed on an individual, local level. See Guidance (5A-7, 5A-8); Art (5B-2, 5B-5, 5B-7); English (5C-8, 5C-9); Latin (5D-b); Consumer (5G-5a, 5G-5b); Informatics pingstone (5H-2); Science (5I-9, 5I-17, 5I-18, 5I-31); Technology (5J-2b, 5J-4); History (5L-8b, 5L-10); Environment (5N-6).				
Fair Degree (2)				Mutual responsibility of all staff (& other schools) to keep contact, either informally or by committee, to link, strengthen programs. See Guidance (5A-3); Art (5B-9e); English (5C-9); Consumer (5G-5b); Science (5I-9, 5I-18, 5I-27); Technology (5J-3); Music (5K-7, 5K-8); History (5L-8b, 5L-13); Geography (5M-3, 5M-6); Environment (5N-2, 5N-6a); Phys Ed (5P-6, 5P-10, 5P-14, 5P-15)			Traditional testing either ignored or advocated against briefly. See English (5C-12); Science (5I-16a); Environmental Science (5N-5); Phys Ed (5P-11, 5P-17)			Says substantial a-v resources needed. Accepts that no school will have all it needs. Encourages sharing, improvising & help from regional offices. See English (5C-6; 5C-8; 5C-11; 5C-13); Phys Ed (5P-2)
Vague Evidence (1)		Environment - need time to digest new (5L-6, 5L-7)			Vague threat of reassessment of education program (5C-1)			Don't look too up - but bridge el & sec. See Guidance (5A-8); Science (5I-12, 5I-13)	Phys Ed must go along with community values (5P-8, 5P-12)	
No Evidence (0)		Otherwise, No Evidence	No indication		Otherwise, no indication	Informatics - promotion of specialization (5H-3, 5H-5)		Justifies stepping up. See Latin (5D-a); Informatics (5H-3)	No indication	

Figure 5.6 - Awareness of Implementation Impediments (Dimension F) in Period 5

Actively Provides	Curriculum bulletins. See Minister Annual Report; English (5C-15); Latin (5D-b); Science (5I-18a); Tech (5J-5); Music (5K-8)								5C-9, 5C-10); Latin (5D-a, 5D-b); Typing (5F-1); Consumer (5G-2, 5G-5a, 5G-5b); Informatics (5H-2, 5H-3); Science (5I-9, 5I-17); Tech (5J-2b, 5J-3, 5J-4); Music (5K-6a, 5K-7); History (5L-8b, 5L-9); Geography (5M-3); Environment (5N-1a, 5N-3); Phys Ed (5P-2)		5B-9e); English (5C-1, 5C-3, 5C-4, 5C-5, 5C-7a, 5C-7b, 5C-10, 5C-13); Latin (5D-4b); Science (5I-2, 5I-3, 5I-4, 5I-7, 5I-15, 5I-16, 5I-19, 5I-20, 5I-25, 5I-31, 5I-32); Tech (5J-2b); History (5L-5, 5L-9, 5L-12, 5L-14); Geography (5M-7); Environment (5N-2, 5N-3, 5N-4); Family (5O-3, 5O-4, 5O-7); Phys Ed (5P-4)
Actively Encourages (2)				Make use of community resources - people and things. See Guidance (5A-2, 5A-3, 5A-10, 5A-11); Art (5B-4); English (5C-11); Consumer (5H-6); Tech (5J-4); Family (5O-7); Phys Ed (5P-7)				For the program to work, teachers must consult, work in committees, experiment with the design. See Art (5B-7); English (5C-1, 5C-10); Latin (5D-4, 5D-4a); Consumer (5G-5a, 5G-5b); Science (5I-2, 5I-9); Tech (5J-3, 5J-4); Music (5K-5, 5K-6a, 5K-7, 5K-8); History (5L-8b, 5L-12, 5L-13); Geography (5M-3, 5M-6); Environment (5N-2); Phys Ed (5P-3, 5P-5, 5P-6, 5P-10)		Insists that planning of concrete course be done on local level - wide flexibility to tinker with vague guidelines. Methods, structure, electives to be amended for classroom environment. See Guidance (5A-7); English (5C-13); Latin (5D-b); Consumer (5G-2, 5G-5a, 5G-5b); Informatics (5H-3); Science (5I-25, 5I-32); Tech (5J-2b, 5J-3); History (5L-9); Geography (5M-3); Environment (5N-1a, 5N-3); Family (5O-3); Phys Ed (5P-2)	
Passively Encourages (1)		Resources either vaguely mentioned or Expected to be obtained by schools, board, community. See English (5C-8, 5C-10, 5C-11); Informatics (5H-6); Science (5I-18a); Tech (5J-3); Phys Ed (5P-2, 5P-5)	Vague - get support & Inform. See Guidance (5A-2, 5A-6); Phys Ed (5P-7)		Vague mention in helping design local programs. See Music (5K-8); Phys Ed (5P-2)	Principal has hand in designing program. See Geography; Phys Ed (5P-2)	Mention that teachers can inspire other teachers, students. See Guidance (5A-10); Consumer (5G-3); Tech (5J-3)				
(0)			Otherwise, no mention		Otherwise, no mention	Otherwise, no mention	Otherwise, no mention				

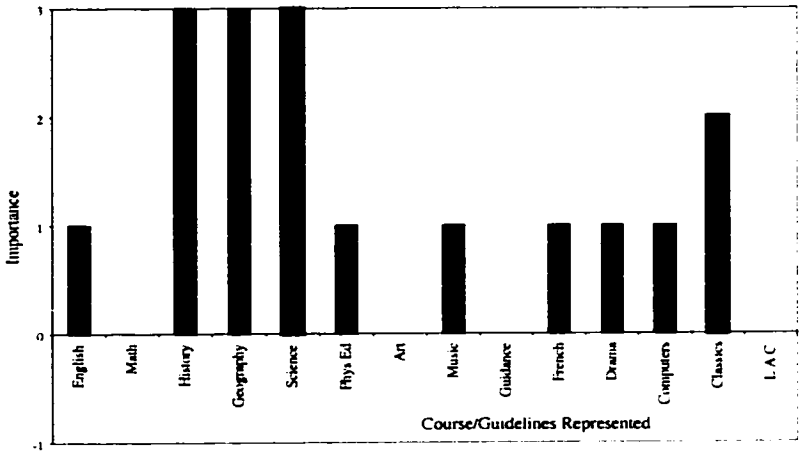
Figure 5.7 - Factors for Assisting or Impeding Curriculum Integration Implementation (Dimension G) in Period 5

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 6

Content

The curriculum policy of this period tries to find a content balance by dividing material into two sections of Core (content that must be imparted to students) and Optional (up to the teacher whether to use it or not). This is used most specifically in Science, Mathematics and Social Science-related courses. While the guidelines explicitly say that they expect each student to achieve mastery over a certain amount of content, they also recognize that content should not dominate the curriculum but viewed as a steppingstone to larger ideas (6C-29, 6D-27, 6E-3, 6E-4). Science goes as far as to treat content in a rather chameleonic fashion, shifting specifics from year to year as the accentuation changes (i.e., one year it can focus on Environmental issues, the next on Technological change). In most other courses, the integration of content is mentioned almost in passing. All this tends to indicate that the Ministry is still shying away from the prescription of any concrete content, perhaps to leave this are to the board and school-level curriculum developers. The Drama document is most telling in that it talks more about how the content should be used (that it should revolve around problems or questions) than dealing with actual content itself.

Figure 6.1.1 - The Importance of Content in Period 6

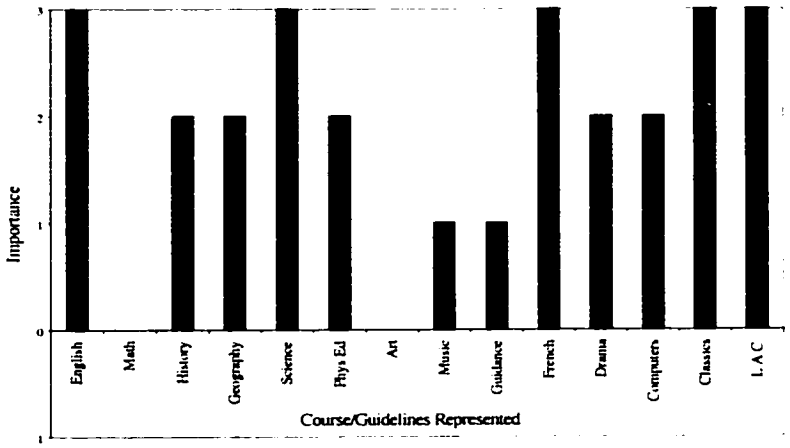


Academic Skills

As promised by the Wells' administration, one of the focal points of this new curriculum was to boost the importance of certain academic skills. What is remarkable about this period is the uniformity of their promotion. This especially holds true for Language skills, which (in one way or another) is represented in almost every area of the curriculum. While the core English course does take prime responsibility for the teaching of language skills, it also demands that each school make an effort to create a

cohesive integrated language program (6B-2, 6B-3, 6B-15, 6B-16, 6B- 19, 6B-21) reinforced throughout the whole curriculum (6B-4, 6B-9, 6B-11, 6B-12, 6B-14). A resource document, "Language Across the Curriculum" was published during this period to add support to the importance of language skills, and gives concrete suggestions on how it can be integrated into almost every subject. To accommodate this integration, the Ministry broadens the definition of the term Language skills to include the "reading" of print, oratory, and non-print material. "Critical examination"[1] is included in the definition of the term as well. Showing a degree of coordination between curriculum writing teams, subjects that had backed away from including language skills in the past now encourage teachers support a Language-Across-the-Curriculum policy. History, Classical Studies, Science, Physical Education, French, and Drama all find ways to develop students written and oral communication skills, draw connections between literacy and its importance to their particular subject.

Figure 6.1.2 - The Importance of Academic Skills in Period 6



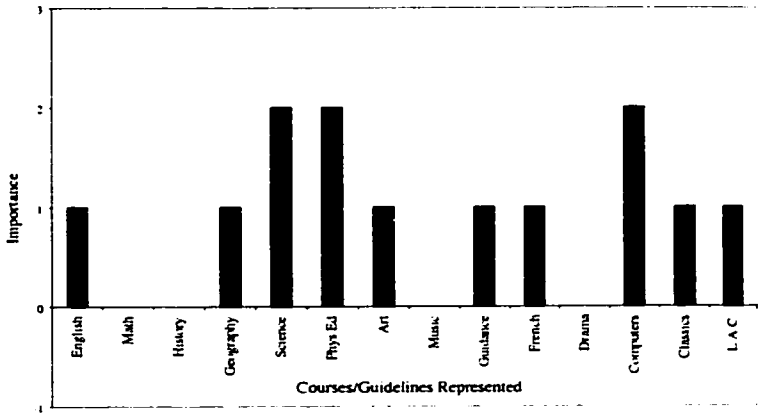
General problem-solving skills were also highly promoted throughout this period. Because, the Ministry had thought it was ignored in the past, it specifically earmarked space in each document to the development of students' thinking, analytical, and problem-solving skills in some way. This might be as simple as the promotion of study and research skills (See Classical, History, Geography, Physical Education, Guidance, Drama and Computers). In other subjects, however, some skills were becoming quite specialized. Intellectual processes related to logical experimentation (6E-3, 6E-4, 6E-5) and other science-related skills (6E-6, 6E-14, 6E-20, 6E-30, 6E-28, 6E-30), for instance become the purview of the Science course, supported only briefly by Classical Studies (6A-14), Physical Education (6F-23), and Computers

(6J-2). Geography is also said to have certain specific skills that should remain in its separate course (6D-17, 6D-24).

Practical/Manual Skills

As the guidelines of the previous period had become more vague and abstract, most references to practical/manual skills had disappeared. The Ministry perceived these skills as very situation-specific – to train a student in a presently-needed skill would only mire him in a rut, and keep him from thinking abstractly. This process appears to continue unabated throughout the present documents. Outside of a brief mention of model building in Classical Studies (6A-13), and the teaching of a few subject related manipulative skills in Geography (6D-17), Science (6E-4) and Physical Education (6F-18, 6F-19, 6F-23) the use of any hands-on approaches is systematically ignored. References to "relevance" are alluded to throughout, but are left hanging with no more than general statements and promises of a field trip (6E-19) or outdoor education (6F-21). In the English guideline and it's accompanying support document teachers are encouraged to teach a "language in practice." However, this is not developed in any specific way (6B-9, 6B-12, 6B-15, 6B-31, 6K-15, 6K-24). Nor are the "real-life" settings seen in French (6H-6, 6H-21) and Computer Studies (6J-1, 6J-7). Vocational outcomes and applicability is mentioned only in Science (6E-5, 6E-16,6E-20, 6E-27), Guidance (6G-19, 6G-20), and Computers (6J-2, 6J-3). As well during this period, computer skills were treated very much as a fringe interest, its study being shunted into an optional, novelty course (one step away from Informatics - 6J-1 to 6J-3, 6J-7).

Figure 6.1.3 - The Importance of Manual Skills in Period 6



[1] This argument puts forward that texts should no longer be simply read at face value. To be truly literate, the reader should also understand the hidden meaning behind what was being said by the author.

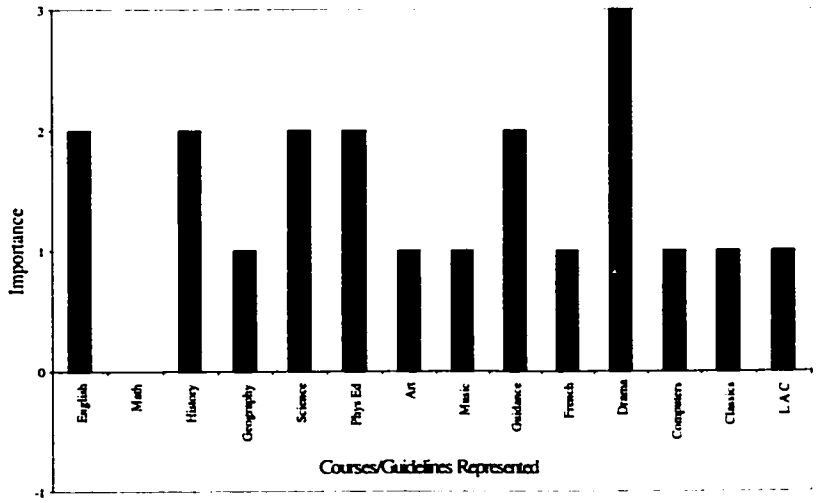
Social Skills

After two periods of stagnation, social skills regains some of its lost prominence in this curriculum. However, as shown in chart — its reception ranges widely from mild advocacy seen in English, History, Science, Physical Education and Guidance, to lukewarm recognition seen in the remaining subjects. Only the Drama guideline, with its accent on interpersonal relations, makes social skills the focal point of the course.

The first aspect of social skills seen throughout this period is the return of the Ministry's promotion of citizenship and community-mindedness. Pock-marked throughout the curriculum are reminders to teachers to inform students about the importance of the democratic process, each citizen's social responsibilities and rights (see History, English). As well, other courses try to situate the student in context so that they can appreciate and embrace their social situation (see Classical Studies, Geography, Science, Computer Studies, Physical Education, Guidance, and to a lesser in French).

To give students some freedom of expression and social interaction, many of the courses allowed a certain amount of student-controlled group work. However, in most cases, these activities are fairly regulated and in most cases segregated to limited portions of the class-time (see figure 6.1). Only three guidelines engage in more freewheeling activities. In Physical Education, a great deal of the class-time is devoted to team building in the hopes that students will develop interpersonal relationships, social (6F-5, 6F-16, 6F-25), and leadership skills (6F-8, 6F-14). The document also recommended Dance as a way of linking customs and social intercourse (6F-20). Guidance devotes a great deal of the course to group work in an effort solve certain social problems and learning how

Figure 6.1.4 - The Importance of Social Skills in Period 6



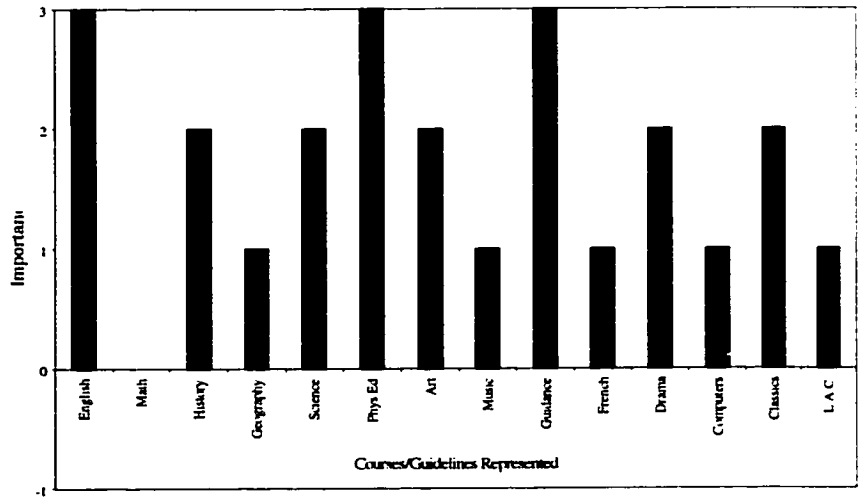
to cooperate in the process. Drama, the most socially driven course of the curriculum, devotes its main aim to discovering "how to communicate with, understand, and become aware of others." Telling students about social skills is not enough, as "the essence of drama is the acting out or playing of a role in a social situation" (6I-2). For a dramatic production to work, group interaction, communication and cooperation of the team are vital (6I-4 to 6I-7, 6I-9).

Individual Development

Although this aim of education has not greatly dropped in importance since the last period, it appears less prominent due to the rising status of Academic and Social Skills. What has changed throughout this period is the Ministry's attempt to handle it in a more effective manner. Previously, it had favoured an individualized approach, in that the integration of individual development entailed the close tracking of each student's personal interests and "special bent." The Ministry now felt that a more universal, prescriptive approach was necessary, whereby certain generic adolescent needs MUST be addressed and of which students must be made aware.

As in the past, certain courses just naturally become the home of this element. Paramount of these is Guidance, created with the mandate to aid the student's personal growth and future choices in life and work. Through the medium of individual counseling and group work sessions (6G-3), counsellors were charged with the "prime responsibility to help adolescents meet their basic needs" (6G-5) – these included a positive self-concept, emotional independence, the development of a personal value system, the development of social relations, the ability to make rational decisions, understanding their sexuality, and the ability to use their

Figure 6.1.5 - The Importance of Individual Development in Period 6



leisure time effectively, among many others (6G-5, 6G-8, 6G-11, 6G-15, 6G-18, 6G-19, 6G-20).

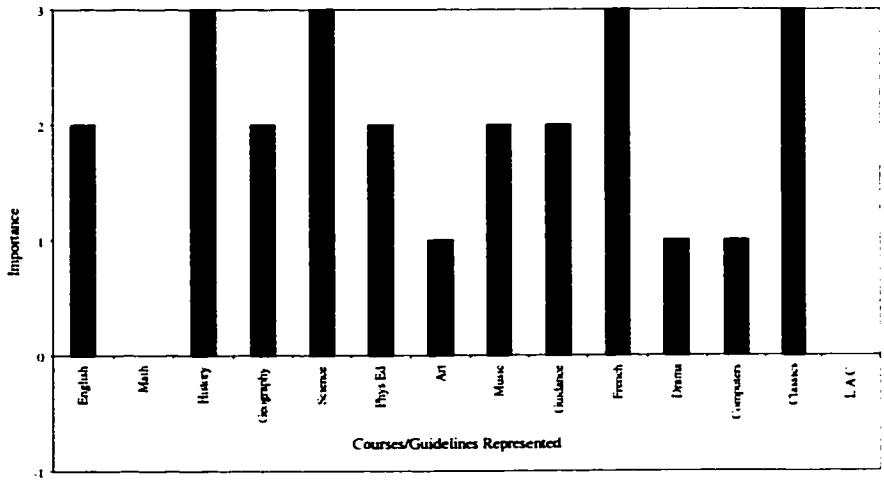
While the predominance of a segregated Guidance class remains the place throughout this period, the guideline does recommend that these aims should be integrated with regular classroom activities (6G-7). Whether this goes beyond the Guidance period is left vague in the document, but most courses, to a greater or lesser extent, attempt to integrate these aims into their mandates by merging them with their specialized subject material. Physical Education, for example, makes it's the teachers responsibility to foster in students a positive attitude to their bodys' changes (6F-5), feelings of self worth, positive self image, aesthetic, moral development, and confidence (6F-7, 6F-8, 6F-23, 6F-25, 6F-26, 6F-27), as well as developing physical, motor skills (6F-8, 6F-16, 6F-19, 6F-20, 6F-23). The English document points out that in learning vocabulary, rules and interaction of communication, and maintaining the discipline to make himself understood, the student learns abstract thought, and thereby develops a positive self image, confidence ((6B-9, 6B-12, 6B-15, 6B-21, 6B-27, 6B-37), personal motivation, and self-direction (6B-17, 6B-30, 6B-32). These subject-related connections are echoed in almost each course guideline: Classical Studies states that it will try to help create the complete person or humanitas (6A-4, 6A-8, 6A-12, 6A-14, 6A-19); History uses past experiences to help students search for their own identity (6C-1 to 6C-3, 6C-6, 6C-36, 6C-13); Science hopes to develop curiosity, motivation and honesty (6E-4, 6E-6, 6E-13, 6E-21, 6E-27); Drama tries to reach the more imaginative, emotional side of the student, to allow the student to learn about himself and his personal resources (6I-2, 6I-4, 6I-5, 6I-6, 6I-9, 6I-11, 6I-14, 6I-18).

Underlying Principles

Overt values and principles continue to hold a fairly diminished place in the curriculum. In fact, the documents systematically eschew the inculcation of any specific ethical codes and maintain the flexible, mutable worldview pioneered by the Davis administration. While teachers are entreated to use the guidelines to aid them in their search, the Ministry clearly states that students must be forced to decide on their own moral code *by themselves.* Certain miscellaneous beliefs are present during this period, but stay wedded to a particular guideline and do not lend themselves well to integration

The one exception to this general rule is the wish to have all students possess an unquestioning respect for multiculturalism. Brought in as official provincial and federal policy in the 1970s, this curriculum reflected the governments' desire to see Canada as a mosaic of different cultures. With almost methodical application, each guideline makes some mention of this new expectation. While it holds prominent place in the aims of English (6B-12, 6B-17) and Guidance (6G-8), History goes one step further to devote several units and an entire year to Canada's Multicultural Heritage (6C-5). Perhaps the most prominent example of the curriculum's new focus on multiculturalism can be found in the French guideline: Hailed as a landmark document, it bluntly stated that French and the French-speaking culture were important dimensions to Ontario. English Ontarians must learn how to be sensitive to these issues (6H-2, 6H-6, 6H-8, 6H-9, 6H-13, 6H-14, 6H-15, 6H-16, 6H-26), as well as more critical of their own culture (6H-9, 6H-15, 6H-16, 6H-26).

Figure 6.1.6 - The Importance of Underlying Principles in Period 6



	To promote subject unity	To promote a child-centred curriculum	continuity	To promote a political change
High Priority (3)	Seems to be going for a balance of Unity and child centred. See History (6C-19, 6C-38); Geography (6D-18) Subjects should be considered balanced bodies of knowledge See Classical(6A-1, 6A-14, 6A-18); English (6B-2, 6B-3, 6B-11, 6B-13, 6B-15, 6B-34); History (6C-19, 6C-28, 6C-29) Geography (6D-11, 6D-21, 6D-14, 6D-18, 6D-24); Science (6E-2, 6E-4, 6E-7, 6E-9, 6E-11, 6E-15, E-18, 6E-24, 6E-29, 6E-30) Phys Ed (6F-26); French (6H-5, 6H-10, 6H-14) Ways should be found to bring these bodies together or help them relate, i.e. integrated units, themes, etc. Classical (6A-10, 6A-11, 6A-16, 6A-17, 6A-19, 6A-21); History (6C-4, 6C-14, 6C-15, 6C-16, 6C-18, 6C-23, 6C-24, 6C-25, 6C-26, 6C-32, 6C-39); Geography (6D-14, 6D-27); Science (6E-2, 6E-4, 6E-16, 6E-17) Some areas may not even have formal courses, but spread into & enhance subjects. Drama (6I-1, 6I-4, 6I-5, 6I-7, 6I-11); Computers (6J-5); LATC (6K-6, 6K-9, 6K-14, 6K-15, 6K-16, 6K-20, 6K-21, 6K-22, 6K-25)	Seems to be going for a balance of Unity and child centred. See History (6C-19, 6C-38); Geography (6D-18) Must attend to student's needs and find some way to interest them. Make it relevant. English (6B-7, 6B-14, 6B-18, 6B-19, 6B-27, 6B-28, 6B-31); History Tries to attend to child's needs (6C-6, 6C-7, 6C-32, 6C-33, 6C-35, 6C-36, 6C-38); Geography (6D-3, 6D-9); Science (6E-15, 6E-16, 6E-17, 6E-18, 6E-20, 6E-28, 6E-29, 6E-34); Phys Ed (6F-4, 6F-10, 6F-26); Guidance (6G-5, 6G-8, 6G-10, 6G-11); French (6H-2, 6H-6, 6H-14, 6H-19); Drama (6I-6, 6I-14); Computers ((6J-1, 6J-2, 6J-3, 6J-12); LATC (6K-3, 6K-14) Active participation an indicator that in right direction. English (6B-2, 6B-3, 6B-12, 6B-15, 6B-24); French (6H-22, 6H-23, 6H-28); Drama (6I-7, 6I-11, 6I-13, 6I-18); Computers (6J-9) Experiential Learning English (6B-37); Science (6E-5, 6E-19); Drama experiential (6I-5) Assessments that students perceive as fair English (6B-32, 6B-38) Students have some hand in creation of program English (6B-30); History (6C-28, 6C-29); Phys Ed (6F-11)		
Medium Priority (2)				Environmentalism See Phys Ed (6F-21) Geography (6D-30) Science (6E-12, 6E-14, 6E-22) Changes in approach made for social reasons & new knowledge See English (6B-2, 6B-3, 6B-4) Science (6E-9, 6E-11), Phys Ed (6F-2, 6F-4, 6F-5, 6F-7, 6F-8, 6F-26 to 6F-28) Changing roles in society See Guidance (6G-3, 6G-8) French presence promoted See French (6H-8, 6H-9, 6H-13 to 6H-16) Changes in society by science, tech See Science (6E-24, 6E-26, 6E-27); Computers (6J-1, 6J-2, 6J-3, 6J-5, 6J-7, 6J-8, 6J-12)
Low Priority (1)		Much reduced as well is the Ministry's accent on making education relevant to the student to garner interest. It is only briefly mentioned only twice in English (6B-31,6E-16), and never discussed again to any extent Some Guidelines have dubious grasp of Child-centred concept. See Classical (6A-3, 6A-15, 6A-19), Science (6E-27) English states that study should get more formalized as they reach certain age (6B-21). Science - Tries to show benefits of science through child's eyes - condescending though (6E-27)	Some rather vague mention of teaching students their responsibility to society & our link to it See Classical (6A-1, 6A-3 6A-5, 6A-12, 6A-14); English (6B-9), History (6C-13); Science (6E-4), Phys Ed (6F-7, 6F-20); Guidance (6G-8, 6G-10, 6G-15, 6G-16, 6G-19, 6G-20); drama (6I-6)	
0	Some mention of some parts of curriculum subject specific. See Phys Ed (6F-19)			

Figure 6.2 - Objectives of Integration (Dimension B) in Period 6

	Ministry	Board	School	Classroom
High Priority (3)	Ministry issues guidelines, written by large inclusive committee - it sets out core objectives, aims, approaches, units for teachers to follow. Prescriptive in objectives and mandatory units rather than method. See Classical (6A-2, 6A-8, 6A-14, 6A-15, 6A-20); English (6B-1, 6B-2, 6B-32); History (6C-5, 6C-23, 6C-25, 6C-35, 6C-39); Geography (6D-2, 6D-3, 6D-7, 6D-9, 6D-12, 6D-18) Science (6E-1, 6E-5, 6E-7, 6E-9, 6E-10, 6E-11, 6E-14, 6E-23, 6E-29, 6E-30); Phys Ed (6F-2, 6F-4, 6F-17, 6F-26, 6F-29); Guidance (6G-3); French (6H-2, 6H-15, 6H-16); Drama (6I-1); Computers (6J-8, 6J-12)			Teachers issued guides and are responsible for developing specific courses, policies from Ministry wishes and guiding students through it. See Classics (6A-9); English (6B-1, 6B-2, 6B-3, 6B-14, 6B-15, 6B-32); History (6C-5, 6C-15, 6C-19, 6C-27, 6C-28, 6C-35, 6C-38, 6C-39); Geography (6D-12, 6D-18, 6D-30); Science (6E-10, 6E-14, 6E-23, 6E-30, 6E-34); Phys Ed (6F-4, 6F-5, 6F-11, 6F-26); Guidance (6G-3, 6G-7, 6G-11); French (6H-3, 6H-10, 6H-15); Drama (6I-14);Computers (6J-5, 6J-8, 6J-12); LATC (6K-1, 6K-22) Teachers have tested innovative courses before issued. See Classics (6A-2). Teachers and students work cooperatively on planning, evaluation. See Classics (6A-3, 6A-8, 6A-15, 6A-20); Drama (6I-13)
Medium Priority (2)			Schools help develop, adapt program through committees, interrelations with other schools. See English Guides issued to schools (6B-1); History (6C-19, 6C-24, 6C-27, 6C-39); Geography (6D-2, 6D-3, 6D-7); Science (6E-14, 6E-23); Phys Ed (6F-4); Guidance (6G-3, 6G-8); French (6H-21); Computers (6J-1) Principal in charge of monitoring policies, programs. See English (6B-4, 6B-13); Science (6E-11); Phys Ed (6F-26) Guidance (6G-3, 6G-8, 6G-10); French (6H-19); LATC (6K-4, 6K-5, 6K-6, 6K-7, 6K-8) Teachers must have relations to get program specified. See Classical (6A-17, 6A-18) English (6B-4, 6B-15, 6B-28); Phys Ed (6F-10); Guidance (6G-11) Computers (6J-8) Schools have experimented with new courses. See Classical (6A-2).	
Low (1)		Boards issue guides, can adapt them, grant local revisions, provide assistance. See English (6B-1); Science (6E-9, 6E-10, 6E-11, 6E-14); Phys Ed (6F-4, 6F-17, 6F-26); Guidance (6G-3, 6G-14); French (6H-3, 6H-20, 6H-21); Computers (6J-8)		
0				

Figure 6.3 - Loci of Integration (Dimension C) in Period 6

	Horizontal	Downwardly Vertical	Upwardly Vertical	Completely Vertical	Insular vertical
High Priority (3)			Intermediate Division holds Grade 7-8 to Grades 9-10 – closer to Senior level than PJ (although many grade 7-8s still in Elementary). A growing process from 7-13. See English (6B-2, 6B-15, 6B-18, 6B-24); History (6C-5, 6C-38); Geography (6D-6, 6D-7); Science (6E-11); Drama (6I-5) Adolescence can spread over Grades 7-10. See Phys Ed (6F-5, 6F-17) Computers - with modifications, this 10-12 guideline can be used in grades 7-9 (6J-5, 6J-12)		
Medium (2)					Intermediate Years remains but there is a recognized juncture between Grades 7-8 & 9-10. The are 2 seen as distinct units. See English (6B-28) History (6C-5, 6C-8, 6C-14, 6C-39); Geography (6D-6, 6D-7) Science (6E-7, 6E-34) ; Phys Ed (6F-2, 6F-21, 6F-27); Drama (6I-11) Vaguely states that adolescent a special time – points to Grades 7-8. See History (6C-6); Phys Ed (6F-5); Guidance (6G-5).
Low (1)		In some courses, 7-8 are linked to elementary, which is separate from secondary. See English (6B-2) Phys Ed is mandatory from Grades 1-8 (6F-2) and sees Intermediate as a logical continuation from PJ content (6F-27) Intermediate Drama sees itself as building on the Formative Years (6I-6)		Education seen as a continuum, with close links between all levels. See English (6B-11); Science (6E-5, 6E-11, 6E-14, 6E-15) ; Phys Ed (6F-18, 6F-21); French (6H-12, 6H-20, 6H-26); Drama (6I-1) Hints at cross-grade connections. See French (6H-19); Drama (6I-11), LAC (6K-6).	
0	Fairly vague statements. For example, English makes a statement that Grade 7 is the foundation while Grades 8 and 9 are consolidation (6B-21, 6B-24). History can split the course into 2 separate grades or combine them (6C-5)				

Figure 6.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 6

	Teacher -Related					Curriculum -Related			Outside Forces	
	Subject Attach	Speedy	Overld	Balk	Threat	Special	Trad Test	2nd Ed	P/C	Lack Resources
High Degree (3)	Don't bound your subject but see broader links to many other subjects. See Classical (6A-9, 6A-14); English (6B-13, 6B-14); Science (6E-5, 6E-12, 6E-14, 6E-16, 6E-20, 6E-20, 6E-24, 6E-30) ; Phys Ed (6F-20, 6F-23); Guidance (6G-3, 6G-8, 6G-15); French (6H-10, 6H-12, 6H-13, 6H-14, 6H-26); Drama (6I-4, 6I-11, 6I-5); Computers (6J-5, 6J-12); LATC (6K-4, 6K-9) Know other course outlines, meet other teachers so overlap avoided. See Classical (6A-16, 6A-17, 6A-18); History (6C-4) Use of Integrated Units, etc should break subject attachment. See Geography (6D-4, 6D-14, 6D-15, 6D-21, 6D-24)			Isolation not effective - teachers, schools must meet, collaborate, coordinate, team teach, share, feel part of community. No longer courses, but programs - be concerned with larger issues of the school. See Classical (6A-16, 6A-17, 6A-18); English (6B-3, 6B-4, 6B-7, 6B-13, 6B-15, 6B-13, 6B-24, 6B-28, 6B-31); History (6C-12, 6C-24, 6C-27); Geography (6D-14, 6D-15); Science (6E-11, 6E-12, 6E-14, 6E-15); Phys Ed (6F-10, 6F-20, 6F-21, 6F-27, 6F-29); Guidance (6G-2, 6G-3, 6G-6, 6G-8 to 6G-11); French (6H-14, 6H-20, 6H-26) Computers (6J-5, 6J-8); LATC (6K-4 to 6K-7, 6K-16, 6K-25)						
Fair Degree (2)						Some flexibility still remains, however. See Classical (6A-8, 6A-10); English (6B-4, 6B-13, 6B-28, 6B-13); History (6C-35) Geography (6D-17, 6D-18, 6D-24); Science (6E-5, 6E-7, 7E-10, 6E-14, 6E-19, 6E-20, 6E-24, 6E-30, 6E-27); Phys Ed (6F-10, 6F-11); (6F-23; 6F-27), Guidance (6G-8); French (6H-10, 6H-14, 6H-27, 6H-28); Drama (6I-11, 6I-14), Computers (6J-12); LATC (6K-6, 6K-9, 6K-25)	Some alternative testing - eg self-evaluation, student involvement, etc. See Classical - weak (6A-8, 6A-15); English (6B-29, 6B-38), History (6C-33, 6C-36); Science (6E-5, 6E-13, 6E-14, 6E-28) Phys Ed (6F-29), French (6H-22), Drama (6I-14, 6I-18), Computers (6J-8, 6J-9); LATC (6K-5, 6K-14)			Must take resources into account when doing program plan will make difference - where will get resources, whose in charge of this, sharing, etc. Points out where can get it. Recognizes need for supplemental documents. See Classical (6A-23); English (6B-6, 6B-7, 6B-13, 6B-28, 6B-31, 6B-36) ; History (6C-32, 6C-40); Geography (6D12); Science (6E-10, 6E-13, 6E-14); Phys Ed (6F-17, 6F-28); Guidance (6G-3, 6G-8, 6G-10); French (6H-7, 6H-21, 6H-26); Drama (6I-14); Computers (6J-5, 6J-8), LATC (6K-8)
Vague Evidence (1)		Vague mention of 1 year implementation period and some flexible variation. See English (6B-1); History (6C-38, 6C-41); Geography (6D-24), French (6H-7, 6H-14); Computers (6J-8)	Try to avoid with larger blocks of time, assistance. See Phys Ed (6F-10, 6F-11); Computers (6J-8) LATC (6K-8)		Some hamstringing, downgrading of teacher's independence implied. See Science (6E-14) Phys Ed (6F-26); Drama (6I-14); LATC (6K-8)			Broad at beginning, specialize by Senior. See Science (6E-2, 6E-5, 6E-11, 6E-14); Drama (6I-11)	Parents consulted when creating certain policies, activities their opinion considered when having them understand evaluation, etc. See English (6B-15, 6B-9); History (6C-36), Phys Ed (6F-20, 6F-26, 6F-27, 6F-29), Guidance (6G-7, 6G-16)	
No Evidence (0)	Phys Ed - WARNING promotes attachment by allowing exercise only in one course (6F-19)		New courses give much more specific, prescribed work, expands the role of teaching. Much work, planning required - even overwhelming at times, although Ministry says it will be worth it eventually. See English (6B-7, 6B-14, 6B-31); History (6C-27); Geography (6D-24); Science (6E-7, 6E-10, 6E-14, 6E-24, 6E-26, 6E-27, 6E-30); Phys Ed (6F-10, 6F-11, 6F-19, 6F-27); Guidance (6G-8, 6G-10); French (6H-7, 6H-14, 6H-26, 6H-27); Drama (6G-14); LATC (6K-6)			Does much to promote a specialized curriculum - says has been too loose in the past. See Classical (6A-18); History (6C-39, 6C-41); Geography (6D-5, 6D-21); Science (6E-1, 6E-7, 6E-10); Phys Ed (6F-17, 6F-19); French (6H-14, 6H-26); Drama (6I-1, 6I-5)	Some fairly standardized testing promoted - tied to objectives See Classical (6A-6), English (6B-29), History (6C-33, 6C-36); Geography (6D-31); Science (6E-28, 6E-29), Phys Ed (6F-22)	Some mention of preparation for, looking towards Secondary Education See Geography (6D-7); Science (6E-7, 6E-10, 6E-26, 6E-28) Phys Ed (6G-7); Guidance (6G-18); French (6H-20)		

Figure 6.6 - Awareness of Implementation Impediments (Dimension F) in Period 6

	Content	Academic skills	Practical/Manual Skills	Social Skills	Individual	Underlying Principles
High Priority (3)			Practical skills can cross over to academic. See OSIS (7A-18) Life skills - to solve practical problems & get along in the "real world". See OSIS (7A-5, 7A-18) B English (7B-21); Math (7D-2, 7D-14, 7D-15); Tech (7E-5, 7E-25); Business (7F-9, 7F-21, 7F-31,7F-58)) Art (7H-6, 7H-6, 7H-14, 7H-32); Science (7I-3, 7I-7, 7I-9, 7I-30, 7I-7, 7I-71, 7I-83, 7J-5, 7J-9, 7J-12, 7J-27, 7J-35) English (7K-3, 7K-15, 7K-75); Geography (7L-22, 7L-81, 7L-86); Music (7M-17). Vocational/Career prep. See OSIS (7A-5, 7A-15, 7A-37); B English (7B-29); Guidance (7C-5, 7C-20); Math (7D-10); Tech (7E-1, 7E-2, 7E-5, 7E-7, 7E-19, 7E-25); Business (7F-2, 7F-29, 7F-2, 7F-5, 7F-9, 7F-22, 7F-35, 7F-48, 7F-56, 7F-59); History (7G-27); Art (7H-13, 7H-14, 7H-26, 7H-32); Science (7I-3, 7I-30, 7I-9, 7I-30, 7I-31, 7I-58, 7I-71); Family Studies, a practical course to begin with, readily concerns itself with Life Skills for the home (7J-5, 7J-9, 7J-12, 7J-27, 7J-35); English (7K-3, 7K-13, 7K-22, 7K-43); Geography (7L-9, 7L-32); Music (7M-8). Some documents leave the term fairly vague, referring to safety skills, consumer skills etc. See Technology (7E-1, 7E-2, 7E-5, 7E-7, 7E-13, 7E-19, 7E-25), Business (7F-9, 7F-35, 7F-59). Basic English mentions personal grooming and general behaviour (7B-21). Science mentions health applications (7I-3, 7I-7, 7I-9, 7I-30) and everyday life problems (7I-7), as does English (7K-13, 7K-22, 7K-15, 7K-47, 7K-75) Miscellaneous mention of everyday applications can be found in OSIS (7A-5, 7A-37), as well as the separate subject guidelines - Basic English (7B-29), Guidance (7C-5, 7C-20), Math (7D-10), Technology (7E-1, 7E-2, 7E-5, 7E-7, 7E-19, 7E-25), Business (7F-2, 7F-29, 7F-2, 7F-5, 7F-9, 7F-21, 7F-31, 7F-22, 7F-35, 7F-48, 7F-56, 7F-59), History (7G-27), Art (7H-13, 7H-14, 7H-26, 7H-32), Science (7I-3, 7I-30, 7I-9, 7I-30, 7I-31, 7I-58, 7I-71), Family (7J-10), English (7K-3), Geography (7L-9, 7L-32), Music (7M-8).		Advocates the development of ideal traits: reach personal potential, resourceful, self-worth, fit, leadership skills, etc. See OSIS (7A-2, 7A-3, 7A-4, 7A-8, 7A-9, 7A-3, 7A-11, 7A-5) 7A-14, 7A-42, 7A-21, 7A-41); B. English (7B-6, 7B-9, 7B-23, 7B-14, 7B-20); Guidance (7C-1, 7C-4, 7C-9); Math (7D-8); Tech (7E-20, 7E-21); Business (7F-5, 7F-8, 7F-9, 7F-29, 7F-35, 7F-59); History (7G-1, 7G-12, 7G-12, 7G-42); Art 7H-3, 7H-6, 7H-14); Science (7I-6, 7I-7, 7I-9, 7I-10, 7I-21, 7I-28, 7I-30, 7I-71, 7I-81); Family (7J-5, 7J-10, 7J-17); English (7K-1, 7K-2, 7K-32, 7K-3, 7K-13, 7K-17, 7K-43, 7K-53, 7K-67, 7K-75); Geography (7L-11, 7L-24, 7L-18, 7L-19, 7L-61); Music (7L-4, 7M-16) Know thyself - see OSIS (7A-11, 7A-5, 7A-21, 7A-41), Guidance (7C-9), History (7G-12), Science (7I-7), Family (7J-10), Art (7H-6, 7H-14), Geography (7L-11, 7L-24), and Music (7M-16) As teachers are expected to be teaching students who suffer from the problem of self-doubt the most, the Basic English course systematically reinforces this point. (7B-6, 7B-9, 7B-23, 7B-14, 7B-20)	Many underlying values reinforced: Environmentalism, social values of Canada, Equity, Lifelong learning, citizenship & the inevitable advancement of technology. See OSIS (7A-5, 7A-5, 7A-16, 7A-42, 7A-14, 7A-20); B English (7B-6, 7B-27, 7B-28); Guidance (7C-4, 7C-5, 7C-5, 7C-10, 7C-27, 7C-26, 7C-27); Math (7D-2, 7D-11); Tech (7E-2, 7E-5, 7E-25); Business (7F-3, 7F-5, 7F-8, 7F-9, 7F-56, 7F-48, 7F-59); History (7G-1, 7G-2, 7G-3, 7G-4, 7G-9, 7G-24, 7G-11, 7G-12,7G-24, 7G-28, 7G-31, 7G-42); Art (7H-2, 7H-3, 7H-6, 7H-15, 7H-27, 7H-32, 7H-42); Science (7I-3, 7I-7, 7I-79, 7I-10, 7I-21, 7I-27, 7I-30, 7I-38, 7I-71); Family (7J-5, 7J-14, 7J-16, 7J-17, 7J-46); English (7K-1, 7K-3, 7K-7, 7K-8, 7K-9, 7K-15, 7K-18, 7K-19, 7K-23, 7K-36, 7K-52, 7K-56, 7K-73); Geography (7L-8, 7L-11, 7L-19, 7L-32, 7L-34, 7L-37, 7L-91, 7L-93); Music (7L-8, 7L-9, 7M-12, 7M-30, 7M-14) Multiculturalism, especially can be seen in OSIS (7A-5, 7A-16, 7A-42), Basic English (7B-6), Guidance (7C-10, 7C-27), Business Studies (7F-9, 7F-56), History (7G-1, 7G-3, 7G-9, 7G-24, 7G-42), Art (7H-6, 7H-15), Science (7I-3, 7I-7), Family Studies (7J-14), English (7K-9), Geography (7L-11), and Music (7L-9, 7M-12, 7M-30). Examples of sex equity can be seen in OSIS (7A-20), Guidance (7C-27), Technology (7E-25), Business Studies (7F-9, 7F-56), History (7G-24), English (7K-1, 7K-23), Geography (7L-32), and Music (7L-9, 7M-12, 7M-30).
Medium (2)	Big promotion of essential academic skills that have cross-over Included is Language, math, problem solving, research, computer skills. Practical can influence academic. See OSIS (7A-5, 7A-13, 7A-42, 7A-15, 7A-42, 7A-18, 7A-37); Basic English (7B-6, 7B-9, 7B-13); Math (7D-2, 7D-14, 7D-12, 7D-13, 7D-15, 7D-16, 7D-17); Tech (7E-6, 7E-13, 7E-25); Business (7F-3, 7F-9, 7F-48, 7F-59, 7F-5, 7F-29, 7F-9, 7F-36, 7F-26, 7F-31, 7F-56) ; History (7G-4, 7G-9, 7G-21, 7G-25, 7G-27, 7G-29, 7G-46); Art (7H-30, 7H-6, 7H-9, 7H-49, 7H-50), Science (7I-7, 7I-9, 7I-11, 7I-21, 7I-69, 7I-30, 7I-33, 7I-81, 7I-56, 7I-1, 7I-81); Family (7J-3, 7J-5, 7J-7, 7J-27, 7J-45); English (7K-2, 7K-14, 7K-26, 7K-32, 7K-43, 7K-46, 7K-52, 7K-67, 7K-73, 7K-78); Geography (7L-6, 7L-11, 7L-26, 7L-14, 7L-25, 7L-34, 7L-35, 7L-28, 7L-37, 7L-64, 7L-77); Music (7M-4, 7M-10, 7M-19) LATC See Math (7D-12), Technology (7E-25), Business (7F-9, 7F-36), History (7G-25), Art (7H-6), Family (7J-7), Music (7M-10) See Science (7I-7, 7I-9, 7I-11, 7I-30, 7I-33, 7I-81), Geography (7L-11, 7L-25, 7L-26, 7L-34, 7L-35). Generic Problem solving skills used in Math (7D-15, Business Studies 7F-31, Art 7H-6, Science 7I-7, 7I-9, History 7G-27, Family Studies 7J-5, Geography 7L-6, 7L-64, etc) For specific Computers applications in each subject see Math (7D-16), Technology (7E-25), Business (7F-3, 7F-9, 7F-48, 7F-59); History (7G-29); Art (7H-50), Science (7I-56), Family Studies (7J-45); English (7K-73); Geography (7L-77), Music (7M-19)		What does society look like & what contribution should we make? See OSIS (7A-3, 7A-4, 7A-5, 7A-8, 7A-11), History (7G-4, 7G-7, 7G-9, 7G-42, 7G-46); Art (7H-3, 7H-6); Science (7I-6, 7I-7, 7I-9, 7I-21, 7I-38); Family (7J-17); English (7K-19); Geography (7L-61) How to "fit into" society - behaviour See OSIS (7A-11), B English (7B-20, 7B-21); Guidance (7C-10); Tech (7E-5, 7E-21, 7E-25); Business (7F-3, 7F-5, 7F-56, 7F-59); History (7G-1, 7G-4, 7G-7, 7G-9, 7G-12, 7G-42) Art (7H-6); Science (7I-7, 7I-9, 7I-81); Family (7J-9, 7J-10, 7J-17) English (7K-2, 7K-13, 7K-32, 7K-19), Geography (7L-37, 7L-61) Group work and dynamics See OSIS - (7A-5, 7A-14, 7A-11, 7A-13); B English (7B-6, 7B-9, 7B-18); Guidance (7C-10, 7C-18), Math (7D-8); Business (7F-29, 7F-30, 7F-35) History (7G-46), Art (7H-14), Family (7J-32), English (7K-13, 7K-32, 7K-22, 7K-61, 7K-62); Geography (7L-35, 7L-71); Music (7M-12) Citizenship training - Math states that it can help in making students become informed citizens, although it gets no more specific (7D-2). Business says that it will train students in team-work, (7F-3), communication (7F-5) courtesy, tact, diplomacy (7F-56) and interpersonal skills (7F-59). History takes much of the teaching of this on its back, it instructs teachers to encourage students to be concerned for others (7G-1), develop a deep understanding for society (7G-4, 7G-7, 7G-9) and their role in it (7G-9) peer relationships (7G-12), the nature of communities and human interaction in general (7G-42, 7G-46). The various aspects of social interaction are explored in their various facets in Art (7H-3, 7H-6), Family Studies (7J-9, 7J-10, 7J-17), English (7K-2, 7K-19) and Geography (7L-61, 7L-71).		
Low Priority (1)	Unstable - in some subjects, content deemphasized, in others content heavy. See Basic English (7B-23); Business (7F-21, 7F-26); History (7G-2, 7G-9, 7G-31); Art (7H-15; 7H-21); Science (7I-12, 7I-21, 7I-69, 7I-71); Family (7J-48, 7J-49, 7J-50, 7J-51); English (7K-48, 7K-78, 7K-81); Geography (7L-4, 7L-6, 7L-11, 7L-24, 7L-13, 7L-37, 7L-83)					
(0)						

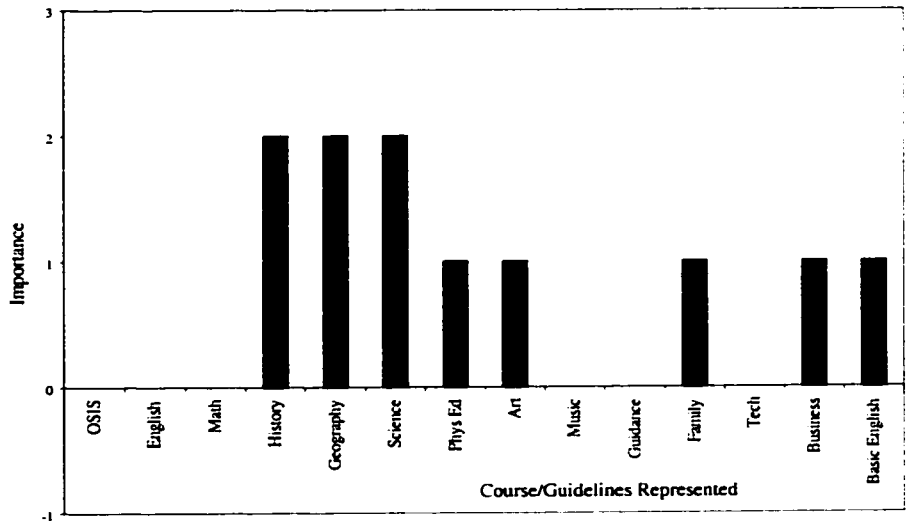
Figure 7.1 - Elements Used During Integration (Dimension A) in Period 7

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 7

Content

As in period 6, the OSIS curriculum maintains that a certain amount of content is necessary but must be subjugated to larger ideas for fear that the study of minutiae may take over the schedule. Most guidelines appear to leave the selection of content as the purview of teachers (7K-81), and mention only a few basic facts. However, while the OSIS document (7A) may give a fairly definite uniformity to the aims of the course of studies throughout this period, subjects continue to vary greatly over suggestions about how much content would be an acceptable amount to transmit to students. Some courses appear to ignore the issue all together, focusing on other issues and aims (such as Math, Music, Art and Technology) Others, like English, advocate that content is important but memorization of lengthy literary passages should be de-emphasized (7K-48, 7K-81). The subjects of History, Science, Family Studies and Geography are perhaps the most content heavy courses each giving a large amount of core information for teachers to impart to students, while instructing them to create more concrete, locally relevant content as well. Even in these courses, however, a caveat is given to teachers against an overuse of content in the fear that it may abuse valuable class time (7I-12).

Figure 7.1.1 - The Importance of Content in Period 7

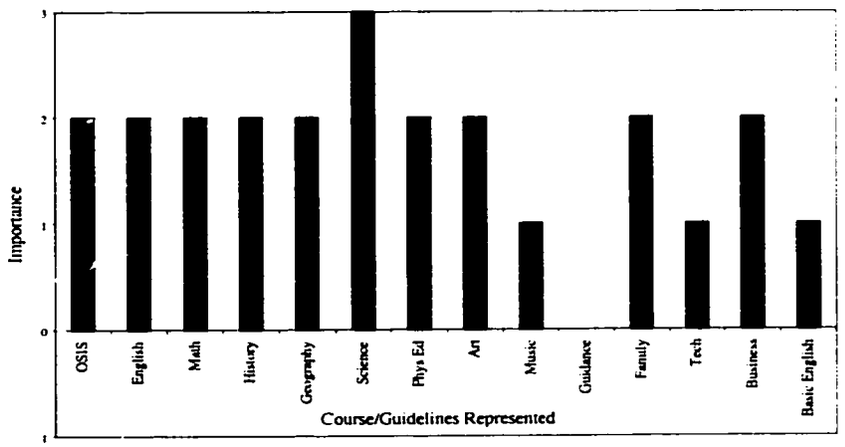


Academic Skills

More than any previous period, the creators of OSIS selected certain skills as universal and systematically applied them "across the curriculum" to reinforce and accelerate their learning. This

represented a substantial amount of organizational unity between the designers and a general agreement about the ideal skills to impart to students. While this differed greatly from the scattered decision-making policies of Period 5, and the suggestive nature of Period 6, it also represented a great broadening of what those ideal skills were. The prime example of this phenomenon was the way "Language Skills" (7A-13, 7A-42), was stretched across the curriculum during this period. Basic language skills are still promoted – namely, basic communication skills (7K-2, 7K-14) both orally (7K-26; 7K-32), and in written form (7K-43) as well as through the various media (7K-46). However, the definition for Language skills had once again stretched into a process (not a subject to be studied) that involved thinking, learning non-verbal communication (7K-52), reading texts and non-print material for hidden messages (7K-46), note-taking, and organization (7K-67). The Ministry stated that these skills should be thought of as pieces of a whole curriculum-wide programme and that English teachers should be charged with the responsibility of ensuring a continuity of language across all subjects (7K-78). See also Basic English (7B-6, 7B-13). Dutifully, every course document contains a section dealing with Language Across the Curriculum. Some areas like Science and Geography discuss their relations to Language even above the requested amount.

Figure 7.1.2 - The Importance of Academic Skills in Period 7



This can also be seen in the OSIS documents' promotion of "learning skills". The term is used to encompass a fair sized grab bag of generic skills and never really discussed in concrete terms (7A-5). Perhaps the most common usages are that of "problem-solving", "decision-making", and "research" skills that could be applicable to any subject. Technological studies links it with "a capacity for clear and creative thinking" (7E-6). History takes a more technical stance saying it would enable students to

"develop the ability to use cognitive skills to research, process and communicate information in a variety of contexts" (7G-9, 7G-21). Art is more esoteric: It wishes to help students "develop a responsiveness to the dynamic process of learning" (7H-6). The more specific skills tend to stay as bailiwicks of particular subject areas. While Mathematics, for example may state that its skills are essential for other disciplines (7D-2, 7D-14, 7D-17), this is not borne out in other subject areas. This juxtapositioning of rhetoric and reality can be seen again and again in the promotion of historical (7G-47) and geographic research (7L-6, 7L-11, 7L-26, 7L-14), Business (7F-5, 7F-29, 7F-56), Art (7H-9, 7H-49) and scientific methods (7I-1, 7I-7, 7I-9, 7I-11, 7I-81). [1]

Shunted into small novelty courses in the past, Computer Skills finally comes into its own in this curriculum. Like Language, "Computers Across the Curriculum" is devoted a section in each subject guideline in an effort to promote its use as a learning tool. OSIS points out that "computer literacy" must be planned into every course to ensure that students can be successful in the future (7A-15, 7A-42).

Practical/Manual Skills

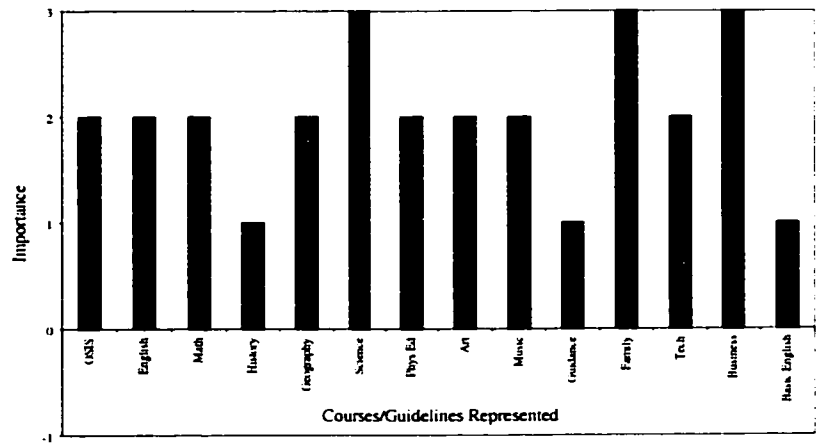
While Practical/Manual Skills makes a seeming rebirth during this period, it must be pointed out that it is of a very different brand than earlier versions. A new term that appears throughout the OSIS curriculum is "Life Skills". The curriculum designers seem to link this to the ability to manage personal affairs, be adaptable to your surroundings and take control of leisure time activities, good health and physical fitness. In short, the term is defined as "abilities that are useful to a person in everyday life" (7A-18), or skills "that contribute to self-reliance in solving practical problems ... such as civics, parenthood, basic technology of the home, consumerism and accident prevention" (7A-5). Mentioned in the "Goals of Education" in Circular OSIS, these skills reoccur throughout all the subject guidelines to varying degrees of clarity.

Like past curricula, OSIS endeavours to show the relevance of certain subjects through the use of real life examples and applications so students will not think of them as isolated from daily life. This is

[1] Although Science has some effect on Family Studies. See (7J-3).

seen in Math (7D-2, 7D-14, 7D-15), Art (7H-14, 7H-32), Geography (7L-22, 7L-81, 7L-86), Music (7M-30, 7M-17) and Science (7I-83). Business takes students through certain simulations to see how theory will be applied (7F-21, 7F-31, 7F-58, 7F-59). Teachers are also asked to persuade students about the benefits of writing to the real-world (7K-43, 7K-75). At the furthest extent, vocational training becomes a towering emphasis during this period. Each curriculum document makes some reference to the occupational ends of education, and in most instances, many passages are dedicated to the skills that will be required by the workforce.

Figure 7.1.3 - The Importance of Manual Skills in Period 7



Missing from this period altogether is the manual aspect. No mention is made in the academic subjects about any hands-on activities or their benefits. Even subjects such as Art that are highly plastic make little mention of any cross-over potential (7H-3, 7H-6, 7H-14, 7H-32).

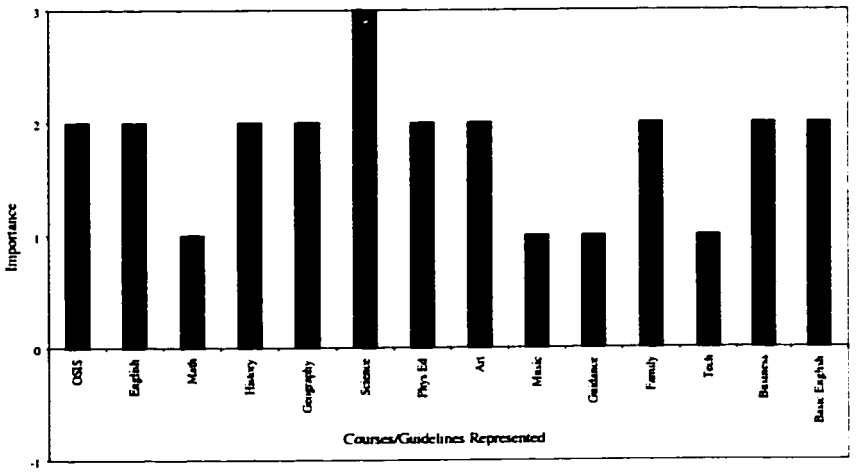
Social Skills

A focal point of education throughout this period is "collaboration". Students are encouraged to engage in group work and other social activities in almost every course. Reminiscent of the Enterprise method's aim, OSIS designers hope that this will instill a desire in students to become functioning members of society, team-players at work and in the community. These expectations are explicitly stated in the Goals of Education in each OSIS document: to "gain satisfaction from participating and from sharing the participation of others in various forms of artistic expression; Develop understanding of the role of the individual within the family and of the role of the family within society; develop a sense of personal responsibility in society at the local, national and international levels (7A-5). Therefore, this curriculum takes the premise one step further - it hopes it will not just affect students in his local scope but

will help keep the country together through this united vision of collaboration and cooperation. The documents then proceed to enforce this position in two ways: through the integration of community/social aspects into the body of knowledge that must be taught to the students, and having them engage in some active form of group work.

The first takes the form of broad recommendations, general aims and principles - the OSIS document sets the scene by instructing teachers to encourage each student to be "a contributing member of society who will think clearly, feel deeply, act wisely" (7A-3). This is more specifically layed out in the subject documents, but the phrasing remains fairly general. The local community is to be exploited readily so that "it can assist them in the realization of their potential in various fields of endeavour and set them on the path to becoming mature, responsible, cooperative members of society." (7A-8, see also 7A-4). Through various facets, each subject takes pains to show how their area will help socialize the student to live in society (see table 7.1). Perhaps the most dedicated course document is Science that looks at society from numerous angles: improving society (7I-6), the individual in society (7I-7) personal responsibility (7I-7) teammanship (7I-9) societal values (7I-9, 7I-38) collective responses (7I-10) societal implications of science (7I-21), honesty, openmindedness (7I-71), and cooperative attitudes (7I-81).

Figure 7.1.4 - The Importance of Social Skills in Period 7



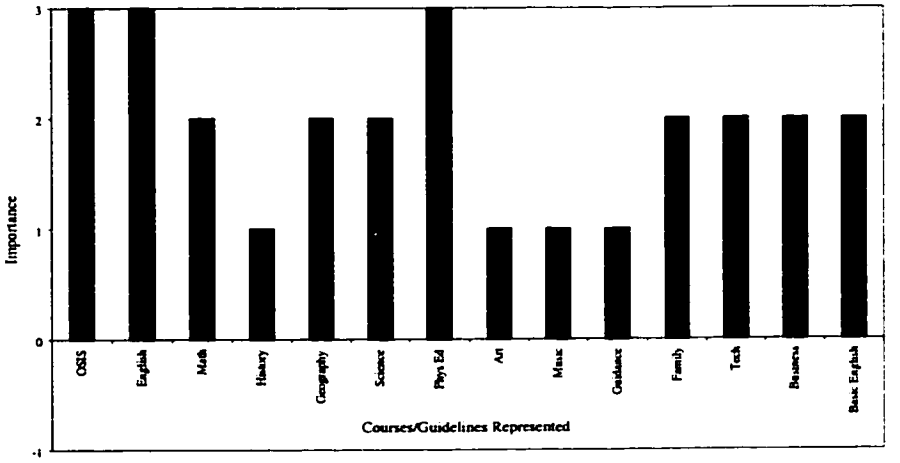
Much more specific is OSIS' focus on "collaborative learning". Each subject includes some amount of group work, and does so for two reasons. First, it does acknowledge that it will free up time for the teacher, and bring out subject-related questions, language study or a preparation for work life more readily (see 7A-13, 7B-6, 7L-35, 7L-37, 7E-5, 7E-21, 7E-25, 7G-47, 7J-32, 7K-22). However, it is also

explicitly stated that group works' major purpose is to encourage social thinking and cooperation. The OSIS document sets a baseline for all subject guidelines: "The integration of the student into social groups, in ways that expand his/her sense of community and responsibility, is essential." (7A-11). It quite obvious that by this period group work has become a fairly entrenched and universally accepted practice, endorsed by the Ministry as a mainstay of a well-rounded education and supported throughout the curriculum documents (see table 7.1).

Individual Development

Like previous periods, the OSIS curriculum is divided on the issue of Individual Development. While it makes many statements concerning the students' special interests, it also promotes certain traits that it feels are necessary for a fully rounded education. The Ministry makes no bones about the fact that it desires teachers to inculcate certain traits and values above others. The Goals of Education state clearly that desirable characteristics include resourcefulness, adaptability, creativity, a feeling of self-reliance, personal responsibility. Furthermore, students should be encouraged to develop values related to personal, aesthetic, ethical or religious beliefs and to the common welfare of society (7A-5, 7A-14, 7A-42), and to be psycho motor/physically active (7A-5, 7A-8). These traits and a myriad of qualifying characteristics that define the "good person" are echoed throughout the subject documents specialized instructions. Most reflect their discipline. For Business Studies, it is the inculcation of business ethics and enough confidence and leadership skills to take on the business forum

Figure 7.1.5 - The Importance of Individual Development in Period 7



(7F-5, 7F-8, 7F-9, 7F-29, 7F-35, 7F-59). For History and Geography, it is the development of the person sensitive to his surroundings (7G-1, 7G-9, 7L-18, 7L-19, 7L-61). Science focuses in of feelings of curiosity and perseverance, in short the abilities that make good scientists (7I-6, 7I-7, 7I-9, 7I-10, 7I-21, 7I-28, 7I-71, 7I-81), while Family Studies wants a good family member (7J-5, 7J-17). Both the Music and Art documents assure personal satisfaction from skill attainment and artistic performance (7L-4, 7H-3). Lastly, English assures the teacher that the students will develop personally concomitant with the development of their language skills (7K-1, 7K-2, 7K-32, 7K-3, 7K-13, 7K-17, 7K-43).

Side by side with this however, is the desire to allow students some freedom to pursue their own interests and for teachers to respond to students' own special needs (7A-2, 7A-3, 7A-4). This is mentioned repeatedly throughout the specialized subject documents, and is especially elucidated in History (7G-12), Guidance (7C-1, 7C-4) and Technology (7E-20, 7E-21). Science, in fact encourages students to pursue their own world view (7I-30). To accommodate this, some documents are created to be flexible, and incorporate students' aid in the design process at the classroom level (7A-4, 7A-9). Math says that as individuals look at it differently, the subject can be handled in various ways to accommodate (7D-2, 7D-8). Integration is promoted as a way of helping students grow as learners and individual taste (7K-53)

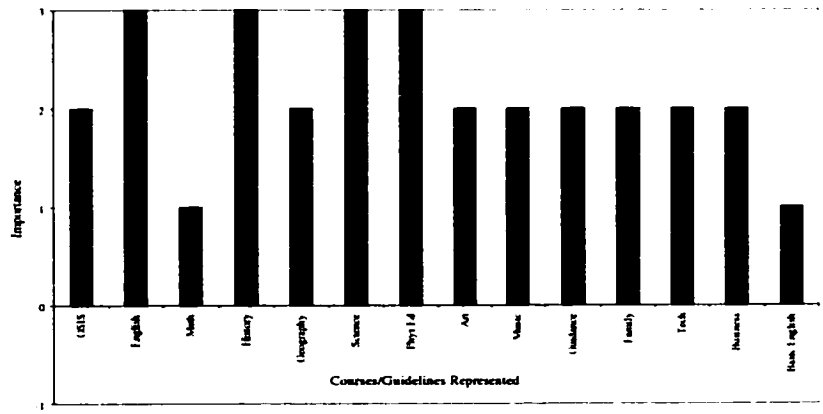
The Ministry does make great attempts to draw the two together, however, saying that they complement each other in the primary desire of education. explains that the two sides must be brought together and synthesized in the student's mind to help create a sense of self-worth and personal growth. To "feel deeply, and act wisely" (7A-3), "to Know Thyself" (7G-42) is, no doubt, the ultimate goal of the education system, according to OSIS and this must be kept in view. Repeated throughout the documents (see table 7.1), English is perhaps the clearest about how the two halves of self-respect are to function in the school setting. Students are to begin their education by receiving many personal values from their surroundings, especially their teachers - as they grow and develop, they are expected to become more independent, more self-reliant, and have increasing confidence in themselves (7K-67, 7K-75).

Underlying Principles

This period stands in fair contrast to its two immediate predecessors, due to its stance on values. While Period 5 made a conscious effort to avoid the inculcation of any value system, and Period 6 only made tentative steps, OSIS incorporates a definite set of perennial values in its curriculum. Reacting to calls from the SERP report, the Ministry explains that over the past several years Canada has changed from a culturally homogeneous, economically stable country to multicultural one with an uncertain future. As the family unit was seen as undergoing a time of transition, OSIS points out that the time has come for the school to step in, to a certain extent, to help to instill a certain amount of "constant" values (7C-4, 7C-5). As "an integral part of the school curriculum," therefore, "Values Education" is brought into almost every subject guideline. Most subjects deal with issues of good and evil only in a situational setting.[2]

English, Art and History go beyond this setting to encourage teachers to promote the study of past ideas and philosophical stances as a way of helping students adopt a code for themselves. Each uses the material of their subject to engage this perennial perspective. History draws upon historical figures and cultures as a didactic tool (7G-4, 7G-9, 7G-11, 7G-12, 7G-31, 7G-42), while Art does much the same using painting, sketching, and sculpture to impress certain values on students (7H-15, 7H-27). The designers of the English curriculum also hope that "the vicarious experience literature offers is a subtle and powerful force in building the character of a nation and its people. Literature is an inspiring record of what men and women have enjoyed or endured, have done, and have dreamed of doing" (7K-8, see also 7K-36, 7K-56). This can, perhaps be tied to the subjects' general promotion of Canadian Arts,

Figure 7.1.6 - The Importance of Underlying Principles in Period 7



[2] Ethical questions are asked of the students, such as "is this action fair?", "did I have a positive regard for my neighbour?" Issues are given special sections in Guidance (7C-26), Math (7D-11), Technology (7E-25), Business (7F-8), (7F-48), Family studies (7J-17, 7J-46), Science (7I-3, 7I-9, 7I-38) and Geography (7L-19, 7L-91).

aesthetic development and culture. There, in fact, appears to be some effort to create a sort of "Arts Across the Curriculum" by certain factions within the various writing teams (perhaps trying to capitalize on the success of Language).[3]

Beyond this, certain values of the previous period return and are accentuated in this curriculum. The dominant value of multiculturalism (now buttressed by sex equity) receives a sub-section in each guideline and in the OSIS general document, itself. It no longer remains in suggestion form, however, but becomes a mandated policy. OSIS now works out a set of acceptable codes and behaviour layed out for boards, schools, teachers and students to follow.

The term "conservation" has now become the more generalized designation of environmentalism. Like the term, its application has also become more widespread. The Goals of Education make the Ministry's stance quite clear - that the student should "develop respect for the environment and a commitment to the wise use of resources. This goal relates to knowledgeable concern for the quality of the environment, the careful use of natural resources, and the humane treatment of living things" (7A-5). This philosophical stance is repeated in almost all subjects, with certain aspects being developed with the discipline-related issues that arise.[4] Similarly, readers are reminded throughout several documents that the world is changing - it is being more and more driven by new technology to create an "information society". This revolution is seen as a great boon to humankind, and teachers are asked by the Ministry to encourage students to exploit and embrace these new inventions (not dissimilar from the Period 4 stance).[5]

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[3] This can be seen in the OSIS document (7A-14), History (7G-28, 7G-31), Art (7H-2, 7H-3, 7H-27, 7H-32, 7H-42), Science (7I-7), Geography (7L-8), and Music (7M-14).

[4] For examples, see Technological Studies (7E-5), History (7G-42), Art (7H-6), Science (7I-3, 7I-7, 7I-9, 7I-79), Family Studies (7J-16), English (7K-23), and Geography (7L-8, 7L-11).

[5] See Guidance (7C-5), Technology (7E-2, 7E-5), Business Studies (7F-3), History (7G-1), Art (7H-15), Science (7I-3, 7I-7, 7I-71), English (7K-73), Geography (7L-37, 7L-34), and Music (7L-8).

	To promote subject unity	To promote a child-centred curriculum	Social continuity	change
High Priority (3)	Subjects can be related to each other for unity - bodies of content have natural connection. While each subject has it's place, they can be combined in integrated units, programs, etc. See OSIS (7A-24, 7A-36, 7A-40); Guidance (7C-5, 7C-15); Math (7D-2, 7D-14, 7D-11, 7D-15, 7D-17); Tech (7E-13, 7E-21, 7E-25); Business (7F-2, 7F-3, 7F-6, 7F-26, 7F-59, History (7G-2, 7G-3, 7G-7, 7G-9, 7G-28, 7G-42); Art (7H-4, 7H-15, 7H-9, 7H-15, 7H-21); Science (7I-8, 7I-9, 7I-49, 7I-10, 7I-17, 7I-66, 7I-69, 7I-71, 7I-81); Family (7J-3, 7J-18, 7J-22, 7J-27, 7J-49, 7J-50); English (7K-36, 7K-43, 7K-47, 7K-52, 7K-54); Geography (7L-6, 7L-13, 7L-25, 7L-37, 7L-49, 7L-75, 7L-77, 7L-88); Music (7L-6, 7M-23, 7M-23)			
Medium Priority (2)		While a nod to student-centred (letting students have hand in curriculum planning, etc.), it is much more the creation of a curriculum that will attend to student needs (defined by teachers and experts) and using "child-centred methods" like showing relevance, active learning, experiential learning (devised by university, board experts). See OSIS (7A-2, 7A-9, 7A-12, 7A-13, 7A-18, 7A-23, 7A-36, 7A-38, 7A-40, 7A-41); B English (7B-1, 7B-2, 7B-9, 7B-13, 7B-14); Guidance (7C-1, 7C-8); Math (7D-8, 7D-10, 7D-13, 7D-21); Tech (7E-20, 7E-34); Business (7F-7, 7F-27, 7F-29, 7F-36, 7F-62); History (7G-10, 7G-11, 7G-12, 7G-18, 7G-21); Art (7H-14, 7H-19, 7H-41); Science (7I-8, 7I-23, 7I-20, 7I-21, 7I-23, 7I-28, 7I-66, 7I-69, 7I-71, 7I-81); Family (7J-18, 7J-32, 7J-33, 7J-37, 7J-51); English (7K-33, 7K-55, 7K-56, 7K-61, 7K-67, 7K-75); Geography (7L-2, 7L-26, 7L-21, 7L-24, 7L-28, 7L-29, 7L-54, 7L-64, 7L-65, 7L-71, 7L-88); Music (7M-2, 7M-26, 7M-40)		
Low Priority (1)				Some mention of changes in society that must be addressed - e.g. multiculturalism, technology, etc. See OSIS (7A-15, 7A-16, 7A-42, 7A-20); B English (7B-27); Guidance (7C-4, 7C-5); Tech (7E-1, 7E-2, 7E-3, 7E-5, 7E-13, 7E-10, 7E-14, 7E-25); Business (7F-3, 7F-48, 7F-8, 7F-35); History (7G-1); Art (7H-50) Science (7I-9, 7I-10); Family (7J-1, 7J-50); English (7K-3, 7K-4, 7K-5, 7K-18, 7K-36, 7K-73); Geography (7L-8, 7L-9, 7L-13, 7L-24, 7L-34, 7L-37); Music (7M-19)
0			Very faint. Some nods to promoting status quo, citizenship or community. Otherwise no. For the few examples see OSIS (7A-5, 7A-8); B. English (7B-20, 7B-21); History (7G-9, 7G-46); Science (7I-38); English (7K-22); Geography (7L-24, 7L-61, 7L-91)	

Figure 7.2 - Objectives of Integration (Dimension B) in Period 7

	Ministry	Board	School	Classroom
High Priority			Curriculum a joint responsibility of the whole school & families of schools - sees subjects in programs. Teachers no longer the lone sage. See OSIS (7A-3, 7A-4, 7A-10, 7A-10, 7A-12, 7A-13, 7A-15, 7A-16, 7A-20, 7A-26, 7A-43); Guidance (7C-2, 7C-6, 7C-7, 7C-8, 7D-6, 7D-19); Tech (7E-8, 7E-34); Business (7F-1, 7F-16, 7F-17, 7F-34); History (7G-21, 7G-33, 7H-11, 7H-12); Science (7I-1, 7I-21, 7I-41, 7I-45, 7I-49, 7I-53); Family (7J-1, 7J-23, 7J-39); English (7K-27); 7K-78); Geography (7E-8)	
Medium		Responsible for board wide implementation, maintenance, assistance, more specific curriculum design. See OSIS (7A-26); Guidance (7C-2, 7C-8); Math (7D-4, 7D-5, 7D-6, 7D-19); Tech (7E-3, 7E-8, 7E-34); Business (7F-14, 7F-15); Science (7I-40, 7I-41, 7I-53); Family (7J-23, 7J-39); Geography (7E-8)		While teacher still front line worker, he is seen less as a lone scholar and more as a team player. Connected closer to school, board. See OSIS (7A-21, 7A-23, 7A-38); B. English (7B-1, 7B-2); Tech (7E-8); Business (7F-18, 7F-27, 7F-34, 7F-62); History (7G-18); Art (7H-13); Science (7I-8, 7I-12, 7I-15, 7I-23, 7I-25, 7I-49, 7I-53); Family (7J-23, 7J-33, 7J-37, 7J-51); English (7K-56, 7K-61); Geography (7E-8, 7L-52, 7L-84)
Low (1)	Ministry gives distributes guidelines with prescribed objectives (written by a staggering amount of people) to other stakeholder levels. Sets out the perimeters of study. OSIS (7A-2, 7A-27, 7A-36, 7A-42, 7A-43); B. English (7B-1, 7B-2); Guidance (7C-2, (7C-8); Math (7C-4, 7D-6) ; Tech (7E-1); Business (7F-1, 7F-14, 7F-15, 7F-58, 7F-59); History (7G-10, 7G-11, 7G-12, 7G-18, 7G-33, 7G-46) Art (7H-1); Science (7I-1, 7I-15, 7I-17, 7I-23, 7I-53); Family (7J-1, 7J-23, 7J-37, 7J-39, 7J-48); English (7K-27, 7K-61, 7K-81); Geography (7L-39, 7L-84).			
Negligible (0)				

Figure 7.3 - Loci of Integration (Dimension C) in Period 7

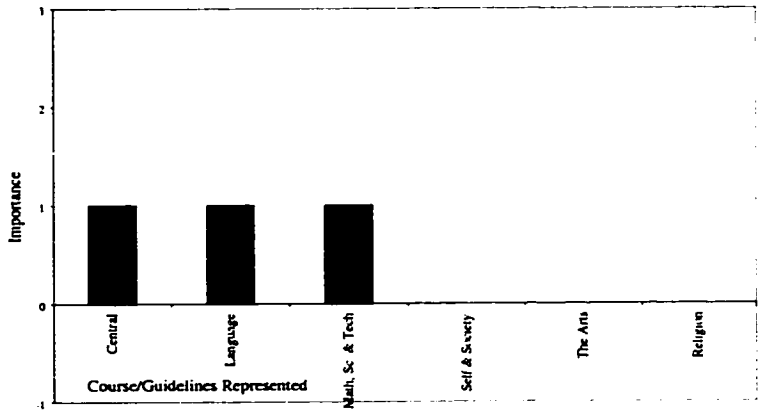
High Priority (3)		subjects. Examples include: Creative thinking skills, adaptation of old skills, language, math, research, tech, problem solving skills, learn how to learn, etc. Specifically, see TY (8A-7); TIC (8B-1, 8B-5); Religion (8C-5); CC (8D-16, 8D-17, 8D-30, 8D-32, 8D-77, 8D-78, 8D-86, 8D-102); Arts (8D-121, 8D-128, 8D-137, 8D-149, 8D-151); Language (8D-155, 8D-167, 8D-157, 8D-165, 8D-170, 8D-183, 8D-191, 8D-212, 8D-240, (8D-244, 8D-252, 8D-245, 8D-251, 8D-257); Math (8A-265, 8A-280, 8A-267, 8A-279, 8A-268, 8A-287, 8A-290, 8A-292, 8A-293, 8A-297, 8A-303, 8A-307, 8A-311, 8A-312, 8A-317); Self & Society (8A-328, 8A-375, 8A-377, 8A-378)				social/scientific change, religion, multiculturalism, equity, bias-free, global village, lifelong learning, environmentalism to name a few. See specific examples - TIC (8B-1, 8B-2, 8B-4); Religion (8C-1, 8C-19, 8C-20, 8C-2, 8C-3, 8C-21, 8C-22); CC (8D-16, 8D-73, 8D-16, 8D-16, 8D-20, 8D-30, 8D-31, 8D-60, 8D-42, 8D-53, 8D-59, 8D-74, 8D-78, 8D-79, 8D-80, 8D-81, 8D-82, 8D-84, 8D-102); Arts (8D-114, 8D-132); Language (8D-155, 8D-160, 8D-211, 8D-163, 8D-167, 8D-176, 8D-202, 8D-206, 8D-209, 8D-215, 8D-225, 8D-227, 8D-229, 8D-259, 8D-260, 8D-262); Math (8D-263, 8D-265, 8D-266, 8D-315, 8D-266, 8D-267, 8D-268, 8D-283, 8D-270, 8D-315, 8D-286, 8D-287, 8D-290, 8D-291, 8D-292, 8D-293, 8D-296, 8D-297, 8D-299, 8D-301, 8D-300, 8D-308, 8D-314, 8D-315, 8D-319, 8D-320, 8D-321, 8D-323, 8D-324, 8D-325, 8D-325, 8D-326); S&S (8D-331, 8D-332, 8D-332, 8D-332, 8D-333, 8D-337, 8D-339, 8D-340, 8D-341, 8D-342, 8D-344, 8D-346, 8D-348, 8D-349, 8D-349, 8D-358, 8D-364, 8D-365, 8D-368, 8D-372, 8D-375, 8D-376, 8D-379, 8D-384)
Medium (2)			Students should learn Life skills and see relevance - for career & "real world". For specific examples, see TY (8A-6); TIC (8B-1, 8B-5); CC (8D-16, 8D-17, 8D-30, 8D-50, 8D-31, 8D-32, 8D-55, 8D-60, 8D-66, 8D-72, 8D-78, 8D-79, 8D-83, 8D-102); Arts (8D-121, 8D-136, 8D-145); Language (8D-155, 8D-157, 8D-209, 8D-213, 8D-218, 8D-245, 8D-262), Math (8D-263, 8D-264, 8D-267, 8D-268, 8D-283, 8D-269, 8D-270, 8D-280, 8D-287, 8D-288, 8D-289, 8D-290, 8D-291, 8D-292, 8D-325, 8D-326), S&S (8D-331, 8D-343, 8D-344, 8D-335, 8D-337, 8D-338, 8D-345, 8D-367, 8D-375, 8D-377, 8D-378) Practical applications and real-life connections can be see in most of the broad content areas - in Language (8D-155, 8D-157, 8D-209, 8D-245), Mathematics (8D-263, 8D-264, 8D-267, 8D-268, 8D-283, 8D-269, 8D-280, 8D-288, 8D-289, 8D-290, 8D-291, 8D-292), and Self and Society (8D-337, 8D-338, 8D-377, 8D-378) All areas recommend that problem-solving is a mandatory skill and that it must be accomplished by integrating in real-life settings (8D-78, 8D-102)			
Low Priority (1)				Students should learn about aspects of our societal role - team work, social skills, group work, communication, community. See Religion (8C-3, 8C-2, 8C-19), CC (8D-16, 8D-17, 8D-81, 8D-139), Language (8D-155, 8D-157, 8D-178, 8D-241, 8D-193, 8D-250, 8D-205, 8D-209, 8D-242, 8D-243, 8D-257), Math (8D-303, 8D-307, 8D-310, 8D-314, 8D-316, 8D-320); S & S (8D-328, 8D-328, 8D-331, 8D-332, 8D-338, 8D-364)	Not very human-centred - says should have personal awareness, personal management, healthy living - but feeling that all related to outside indicators. See TY (8A-6); Religion (8C-22), CC (8D-17, 8D-49, 8D-83, 8D-85); Language (8D-155, 8D-160, 8D-163, 8D-209, 8D-229, 8D-246, 8D-254, 8D-257, 8D-259, 8D-262); Math (8D-314, 8D-315, 8D-319, 8D-326), S&S (8D-328, 8D-343, 8D-331, 8D-332, 8D-335, 8D-333, 8D-345, 8D-346, 8D-364)	
(0)	Vague hints - but practically no hard content to integrate. See CC (8D-30, 8D-32, 8D-66, 8D-117, 8D-121, 8D-137, 8D-200, 8D-266, 8D-317)					

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 8

Content

The use of content, let alone the integration of content, is almost a dead letter in the Common Curriculum. Being concerned almost solely with aims and student outcomes, the document appears to leave the inclusion of all concrete details to the school boards and schools. To find this material, the Ministry's only suggestions are that they use the OSIS documents, and an extensive range of media texts (8D-200). Once obtained, the Ministry then recommends that subject matter should be grouped into broad content areas (8D-32), balanced (8D-117) and transmitted to the student in such a way as to avoid any isolation of content within the curriculum (8D-30, 8D-66, 8D-121, 8D-137, 8D-266, 8D- 317). The teacher is reminded that as part of outcomes-based education, the sole purpose of content is to merely help procure the mandated outcomes (8D-66).

Figure 8.1.1 - The Importance of Content in Period 8



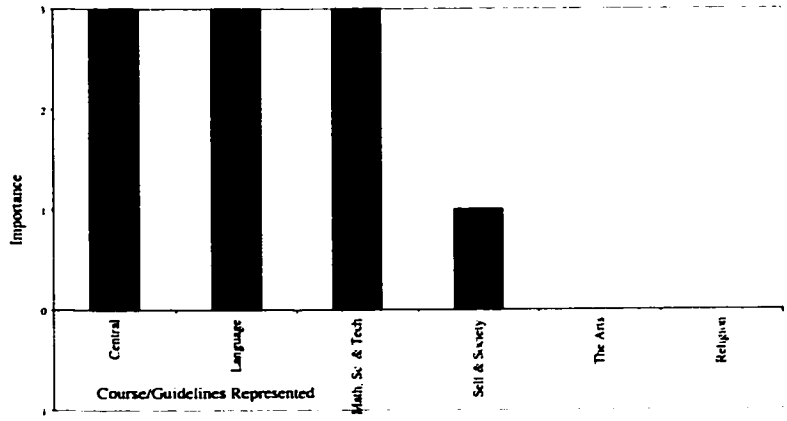
Academic Skills

The academic skills promoted throughout the Common Curriculum remain much the same as earlier periods - Language Skills, problem-solving, Math and Computers skills. However, what has changed is the way this guideline wishes these skills to be taught. Believing that previous approaches tended to isolate the skill (so students didn't see the relevance), or transfer the skill in unwieldy chunks or sections in the guidelines (as the various "-Across the Curriculum" approaches had done), this guideline recommends the use of "Integrated Learning" (8D-102). At the crux of this method, students are to learn skills in such a way that they can transfer them to various situations divorced from the subject areas altogether (8C-5, 8D-128, 8D-137). Driving this integrative thrust is the desire to teach students "Creative thinking", where students can be taught to take seemingly disparate skills and combine them in new ways to solve problems

(8D-78), and to think about issues that arise around them (see 8D-1, 8B-5, 8D-16, 8D-17, 8D-30, 8D-86, 8D-102). To encourage this process, the Ministry lays out the guideline, not in subjects, but in four broad areas that revolve around skills (namely language skills, math skills, interpersonal skills, and artistic skills) (8D-32). Reinforced throughout the curriculum is the belief that all these skills are interconnected and must be taught as such.

The Common Curriculum, recognizing the centrality of "Literacy skills", broadens the term even further than the OSIS documents had recommended. Included are not only the basic skills of reading and writing, but of all forms of communication, media skills, active and passive viewing skill (8D-155, 8D-156, 8D-65, 8D-167). Defined in such a way, Language is seen as the basis of almost all further learning and must be reinforced no matter what is being taught (8D-157, 8D-183, 8D-244, 8D-252, 8D-251). As such, the guideline links language to several purposes, both academic and personal (8D-170, 8D-257), to computer skills (8D-191), to problem-solving abilities (8D-212), and higher understanding of ideas (8D-240, 8D-245). Mathematical/Scientific/Technological skills are highly promoted as well. They are especially linked to generic problem solving skills (8A-265, 8D-268, 8A-267, 8A-279, 8A-280, 8A-287, 8D-303, 8D-307, 8D-317), explaining connections between areas of the curriculum and systems outside of it (8A-290, 8A-292, 8A-293), predicting trends through analysis (8A-297), and gathering information from various sources using appropriate methods (8A-311, 8A-312, 8A-328, 8A-375, 8A-377, 8A-378).

Figure 8.1.2 - The Importance of Academic Skills in Period 8



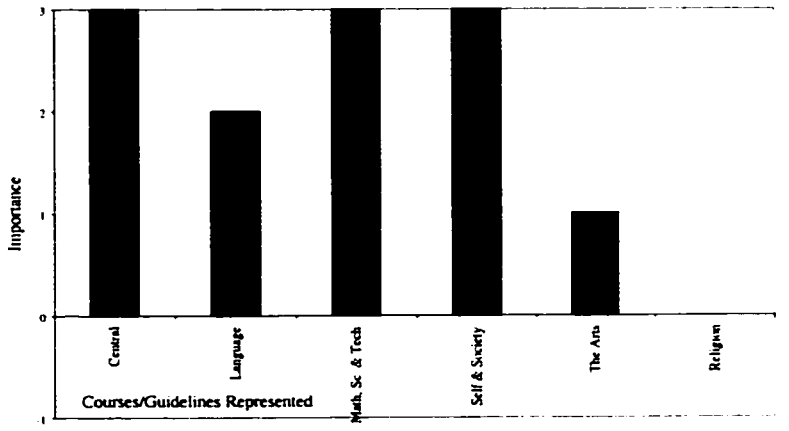
Practical/Manual Skills

The traditional vocational/hands-on elements are severely curtailed during this period. Unlike the OSIS period, career planning at the Grade 7 and 8 period remain a vague and distant proposition, and the

Ministry brings it in only incidentally to foreshadow future decisions that students must make at later grades. Like all other skills, they state that that career planning should be integrated everywhere rather than isolated to one guidance class (8A-6, 8D-270, 8D-331, 8D-343, 8D-344, 8D-377). An especial accent is placed on teaching student broad adaptable skills that may benefit employers of the future. These may include personal management skills (8D-17), entrepreneurial skills (8D-345, 8D-367, 8D-375), how to manage new high-tech communication (8D-213, 8D-218, 8D-262), and computers (8D-79, 8D-83, 8D-268, 8D-283, 8D-326).

Like the previous period, manual skills are not seen as a means of attaining higher intellectual processes (as had earlier been assumed). Hands-on activities, when mentioned, are in most cases included for strictly specialized purposes, such as typing training for more efficient computer use (8D-79), exercise in the Physical Education area of Self and Society (8D-335), and hands-on activities in the Arts (8D-121, 8D-136, 8D-145). However, any carry-over is not mentioned.

Figure 8.1.3 - The Importance of Manual Skills in Period 8



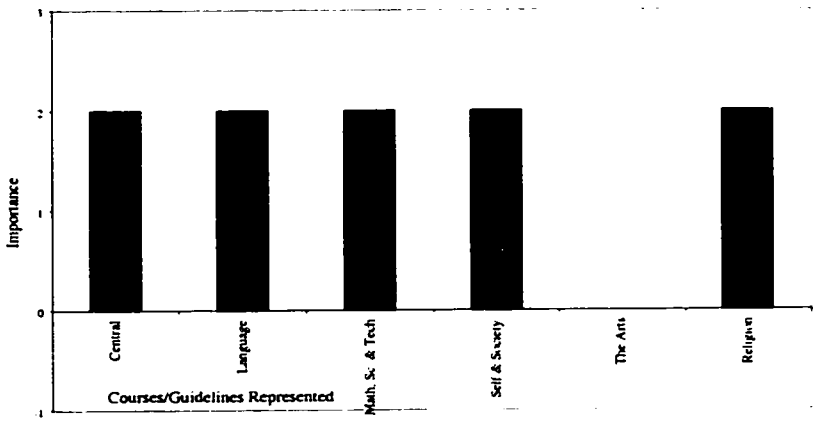
The greatest change in mentality of the Ministry during this period is reflected in the merger that the Common Curriculum makes between academic skills and "real-life situations" (8B-1, 8B-5). It maintains that skills have to be adaptable and fairly abstract because the world is moving so fast. While there is always an accent on helping "students to see the connections and relationships among ideas, among people, and among things in the real world" (8A-30, see also 8D-31), there is also a belief that "students need to apply existing knowledge in new situations in order to function effectively in an environment of continuous change" (8D-31). In either case, the Ministry instructs teachers to always keep students aware of the practical connections and the concrete reasons for learning a certain skill (8D-50, 8D-55). It is believed by

the Ministry that over time, and exposure to a wide range of experiences (8D-66), students will naturally internalize these beliefs and develop "broadly applicable and functional skills" to prepare them for today's "global framework" (8D-60).

Social Skills

While it only makes occasional reference to group work methods (8D-243, 8D-257), the Common Curriculum is structured in such a way that it would be difficult for the teacher to relate skills, attitudes and content in any way other than in a social situation. This is due to the fact that most mandated learning outcomes are linked back to this element. Students are expected to demonstrate team-building skills (8D-16, 8D-17, 8D-81, 8D-328, 8D-332), and show how this skill can lead to their contribution to the community (8D-139) and society as a whole (8D-328, 8D-338, 8D-364). As well, they are to communicate in such a way as to make themselves understood, develop socially, and become accepted by the group (8D-155, 8D-157, 8D-178, 8D- 241, 8D-193, 8D-250, 8D-205, 8D-209, 8D-242, 8D-303, 8D-307). Constantly, the curriculum explains that collaboration with others is necessary for them to develop personally (8D-316), become less egocentric (8D-310, 8D-320), and more accepting of society's interdependence (8D-314, 8D-331). In religion, the students are to look to ways that will reduce barriers between peoples, create social harmony, and sense of community (8C-2, 8C-3, 8C-19).

Figure 8.1.4 - The Importance of Social Skills in Period 8



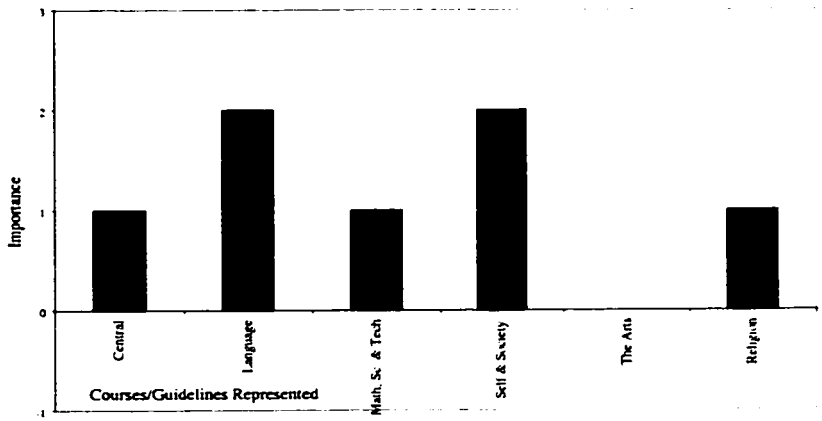
Individual Development

The development of the Individual is difficult to pinpoint and describe throughout this period. This may be due to the Outcomes Based Education method. Rather than encouraging any inner qualities that can only be felt by the learner, the curriculum dwells exclusively on a list of outcomes that must be described by outward appearance and behaviour. With this in mind, the only thing teachers can do is to try to measure the

material responses that students may give. Do they act more objective? Are they pursuing a healthy lifestyle? Are they better at managing their time? Are they more critical of bias? (see 8D-17, 8D-85, 8D-332, 8D-335, 8D-345, 8D-346, 8D-314, 8D-259)

To develop individual qualities, therefore, the curriculum recommends two approaches. Firstly, personal growth must be tightly linked to social development and acceptance. A strong link is made in the minds of the curriculum designers between a person's feeling of inner confidence and self-worth by how he treats others. "In order to take responsibility for their personal well-being, students need to learn how to stay healthy and active and to have positive relationships with others" (8A-333, 8D-364). This linkage is taken even one step further in a section dedicated to "The Person and Social Studies" (8D-328), wherein the person is tied to society (8D-343, 8D-331). The Curriculum goes so far as to instruct teachers to tie personal wellness with social services and accentuate the toll poor health takes on the taxpayer (8D-364). Secondly, the Curriculum tries to link the achievement of outcomes to student development. It states that students "need to realize that consistent effort will help them to achieve their goals and bring them satisfaction, enjoyment and increased self-esteem" (8A-49). This is reinforced in Religion (8C-22), Language (8D-155, 8D-160, 8D-163, 8D-209, 8D-254, 8D-257), and Mathematics (8D-315, 8D-319, 8D-326).

Figure 8.1.5 - The Importance of Individual Development in Period 8



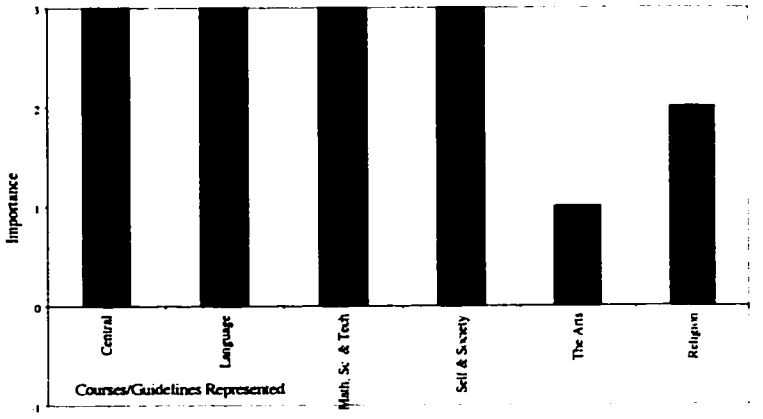
Underlying Principles

With an obvious agenda of promoting "Social Justice", the Common Curriculum integrates a number or values into the curriculum that are to be inculcated to the students. Of paramount importance is the concept of equity - the desire to make all peoples equal, so that no racial, sexual or cultural group has any advantage over the other through direct intervention. The document illuminates several ways that the

students can help improve equitable situations on a daily basis. These include such things as removing biased language from literature and other media (8D-160, 8D-211, 8D-176, 8D-206, 8D-259), continually questioning the hidden agendas behind sources of authority in Ontario society (8D-202), and showing students ways in which they can improve equity, such as through liberation movements (8D-16, 8D-332, 8D-344, 8D-348, 8D-349, 8D-365, 8D-379).

Threaded through the entire curriculum, multiculturalism has become another integral part of the fabric (rather than given a special section). Reinforced by a nebulous notion of the "global perspective" (8D-20, 8D-80, 8D-81), each area upholds this tenet, looking at it from a different perspective. Language links itself closely with culture and the guideline instructs teachers to be careful about identifying and eliminating any cultural bias in the writing process (8D-160, 8D-176, 8D-206, 8D-211, 8D-259). Alongside this is a desire to learn more about various cultures through the interaction of literature (8D-167, 8D-215), especially in relation to French (8D-227, 8D-260, 8D-262) and Native cultures (8D-229). In Mathematics and Science, teachers should feel it incumbent upon themselves to habitually point out the contributions of ethnic minorities and women to the field of study (8D-266, 8D-315, 8D-270, 8D-315, 8D-321, 8D-326). Self & Society, and the Arts follow a similar method, showing ways of dealing with forms of harassment or discrimination (8D-114, 8D-332, 8D-337, 8D-358).

Figure 8.1.6 - The Importance of Underlying Principles in Period 8



Environmentalism is also promoted throughout the curriculum. Of especial interest to the curriculum designers is showing students the outcomes of positive and negative relationships between mankind and nature, such as poor waste handling, thoughtless exploitation, and negligence (8D-79, 8D-82). While this principle is strongly defended, however, it is fairly segregated to the Mathematics, Science and Technology area (8D-263, 8D-265, 8D-266, 8D-268, 8D-283, 8D-293, 8D-296, 8D-299, 8D-301, 8-324,

8D-325). The guideline also encourages students to try to solve these problems, through classroom activities, such as designing and creating alternative energy sources (8D-290), creating action plans to solve local environmental problems (8D-325), and using advocacy skills to demand responsible environmental policies from leaders of the community (8D-346, 8D-372).

Lastly, the Common Curriculum lays out a fairly strong, unified code of ethics that is to be imparted to the students. However, as mentioned earlier, this is a social code rather than an individual moral system. For example, Self & Society promotes discussions of values (8D-331, 8D-333), but mostly include conversations of "becoming a risk taker" (8D-332), "Spotting forms of violence" (8D-339), "sex education" (8D-340), "aesthetic judgements" (8D-84) "The theory of Evolution" (8D-300), "drug, alcohol, and cigarette abuse" (8D-341), and "safety practices" (8D-342). Similarly, the implications of scientific investigation are repeatedly discussed - responsibility (8D-267), honesty and integrity (8D-308), various view-points (8D-314, 8D-320) positive attitudes towards science (8D-315) and the treatment of living things by society (8D-319, 8D-323) are all mandatory elements that must be scrutinized. Ethical business dealings are looked at as well (8D-368, 8D-375, 8D-376). There are some phrases within the Common Curriculum that would lead teachers to try to develop some moral conscience divorced from social conscience. However, they are few and far between (8D-74). Even Religious Instruction, newly reinstalled during this period, becomes less an inculcation of moral values, and more a study of cultural mores. The guideline recommends that only principles with the broadest possible acceptance should be mentioned, and the only solid beliefs that should be instilled in the student are a respect for all the faiths and their trappings. That way the various religions can better understand each other and live in peace (8C-1, 8C-19, 8C-20, 8C-2, 8C-3, 8C-21, 8C-22).

High Pri	10, 8D-16, 8B-19, 8B-20); Religion (8C-4, 8C-7, 8C-8, 8C-20, 8C-23); CC (8D-30, 8D-32, 8D-66, 8D-78, 8D-79, 8D-80, 8D-95, 8D-102, 8D-121); Art (8D-137); Language (8D-156, 8D-169, 8D-228, 8D-258); Math (8D-263, 8D-263, 8D-264, 8D-266, 8D-286, 8D-287, 8D-269, 8D-287, 8D-291, 8D-292, 8D-293, 8D-296); S&S 8D-327, 8D-361, 8D-362, 8D-373)			167, 8D-176, 8D-262, 8D-265, 8D-266, 8D-270, 8D-315, 8D-287, 8D-290, 8D-291, 8D-292, 8D-293, 8DA-299, 8D-301, 8D-300, 8D-314, 8D-324, 8D-324, 8D-325, 8D-326); S&S (8D-328, 8D-332, 8D-332, 8D-332, 8D-339, 8D-340, 8D-341, 8D-342, 8D-344, 8D-346, 8D-348, 8D-349, 8D-349, 8D-351, 8D-352, 8D-353, 8D-354, 8D-357, 8D-364, 8D-373, 8D-375, 8D-384)
Medium (2)				
Low Priority (1)		Vague. Some mention of twigging students' interest – but mostly getting students to see relevance & connections. See TY (8A-4); TIC (8B-1, 8B-4, 8B-9); Religion (8C-7, 8C-19); CC (8D-33, 8D-48, 8D-60, 8D-67, 8D-78, 8D-92, 8D-100); Language (8D-160, 8D-161, 8D-209); S&S (8D-328)		
(0)			Almost non-existent. It ignores the status quo. For exception, see CC (8D-16); Math (8D-263)	

Figure 8.2 - Objectives of Integration (Dimension B) in Period 8

	Ministry	Board	School	Classroom
High Priority (3)		Boards and Schools jointly responsible for the proper implementation of programs, curriculum design, policies, adapt for localities. See TY (8A-2); TIC (8B-15); Religion (8C-5, 8C-6, 8C-13, 8C-14, 8C-16); CC (8D-65, 8D-87, 8D-97); Language (8D-234, 8D-235)	Boards and Schools jointly responsible for the proper implementation of programs, curriculum design, policies, adapt for localities. Schools can organize curriculum into 4 broad areas if chooses. School-based plans, groups of 6 teachers. Principal deep involvement. See TY (8A-1, 8A-2, 8A-5); TIC (8B-15, 8B-16, 8B-19); Religion (8C-5, 8C-7); CC (8D-59, 8D-65, 8D-87, 8D-97); Language (8D-233)	
Medium (2)	Outcomes of Common Curriculum must be followed to the letter. Ministry dictates steps of program planning. Ministry highly promotes certain teaching methods. The Ministry will provide as many documents as teachers need. See TY (8A-10); Religion (8C-5); CC (8D-43, 8D-97, 8D-100); Language (8D-173, 8D-233); Math (8D-271); Self & Society (8D-329)			Teachers must follow outcomes to the letter. Can vary approach, but Ministry has some strong recommendations. See TY (8A-10); TIC (8B-9); Religion (8C-5); CC (8D-91, 8D-100)
Low Priority (1)				
(0)				

Figure 8.3 - Loci of Integration (Dimension C) in Period 8

	Completely Horizontal	Downwardly Vertical	Upwardly Vertical (Grade 7 & 8 linked to higher grades)	Completely Vertical	Insular vertical
High Priority (3)		Schismatic - Common Curriculum applies over Grade 1-9 (8D-71)			Schismatic - Transition Years starts off making Grades 7, 8, 9 linked as a separate period. See TY (8A-1, 8A-4, 8A-8, 8A-8); TIC (8B-14)
Medium (2)					
Low Priority (1)				Some mention of links of elementary Common Curriculum to higher education. See CC (8D-66, 8D-71); Language (8D-209, 8D-269)	
(0)	Not mentioned		Not mentioned		

Figure 8.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 8

Religion		historical approach to religion (8C-11)	Draw connections with other aspects, areas when studying religious traditions (8C-10, 8C-23)					thematic approach promoted (8C-9, 8C-10, 8C-23)		
The Arts		Use art in other areas (8D-124, 8D-137), Themes & Connections in Arts (8D-149, 8D-151)	Study of art with other curriculum areas (8D-117), art's effect on attitude, [illegible] (8D-150)	Balanced Arts program of the above (8D-117)			Could be interpreted as such			
Language		Use variety of art, tech [illegible] (8D-91, 8D-251, 8D-255) [illegible] (8D-249), [illegible] (8D-266, 8D-268)	Find [illegible] (8D-161), Connections to [illegible] (8D-261)						Language, skills, computers AC (8D-169, 8D-170, 8D-191)	
Math, Science & Tech		[illegible]	[illegible]	Math, science and tech definitely grouped together (8D-263, 8D-275) Science further broken down to life science, earth science, space and physical, nature of science and environmental issues (8D-267, 8D-317)	**Math skills can be inserted into other areas - eg stats in social planning (8D-264)**		Could be interpreted as such	Look at problems, issues - real or otherwise. Systems (8D-286 to 302, 8D-314-376, 8D-317, 8D-325)	Computers (8D-312)	
Self & Society		**Look at religious, cultural viewpoints (8D-320, 8D-321)**	**Correlate relationships between political, social, physical patterns (8D-370)**	Some areas pretty close - eg geography, history, politics, social - but go unmentioned (8D-355)			Self and society a fusion of business studies, family studies, geography, guidance, history and Phys Ed - among other (8D-327) looks at environmental, social, economic - fused together (8D-362)	Many themes (8D-328, 8D-339, 8D-340, 8D-341, 8D-342, 8D-354-360, 8D-367, 8D-368-374)	Computers (8D-378)	

Figure 8.5 - The Integration Methods/Approaches Used (Dimension E) in Period 8

Legend: ■ = Primary Mode ■ = Secondary/Localized Mode □ = Incidental Mode

High Pric	36, 9C-38, 9C-39, 9C-41, 9C-53); Geography (9C-43, 9C-54, 9C-55, 9C-47, 9C-50, 9C-51); Science (9D-2, 9D-20, 9D-21, 9D-24, 9D-25, 9D-28, 9D-3, 9D-5, 9D-7, 9D-11, 9D-16, 9D-27, 9D-30); French (9E-3); Phys Ed (9F-1, 9F-10, 9F-17); Arts (9G-1, 9G-10, 9G-19, 9G-21)	9B-31); H&G (9C-1, 9C-2, 9C-4, 9C-6, 9C-8, 9C-11, 9C-13, 9C-17, 9C-21, 9C-23, 9C-26, 9C-27, 9C-31, 9C-34, 9C-36, 9C-29, 9C-29, 9C-41, 9C-43, 9C-54, 9C-55, 9C-45, 9C-46, 9C-47, 9C-50, 9C-51); Science (9D-2, 9D-7, 9D-20, 9D-21, 9D-24, 9D-28, 9D-4, 9D-5, 9D-11, 9D-14, 9D-15, 9D-16); French (9E-2, 9E-8, 9E-3, 9E-18, 9E-5, 9E-13); Phys Ed (9F-1, 9F-5, 9F-9, 9F-10, 9F-17); Arts (9G-1, 9G-10, 9G-19, 9G-22, 9G-24, 9G-26, 9G-27, 9G-28)				
Medium (2)			Lifelong learning. Real-life problems called PRACTICAL APPLICATIONS. Slight talk of career. Hands-on in Science & Art. See Math (9A-1, 9A-9, 9A-10, 9A-11, 9A-13, 9A-14, 9A-19, 9A-22, 9A-23, 9A-24, 9A-25, 9A-28, 9A-29, 9A-30, 9A-34, 9A-39); Language (9B-2, 9B-5, 9B-8, 9B-11, 9B-16, 9B-17, 9B-28, 9B-29, 9B-30); H&G (9C-1, 9C-6, 9C-7, 9C-11, 9C-21, 9C-22, 9C-25, 9C-30, 9C-35, 9C-42, 9C-45, 9C-48, 9C-51, 9C-56); Science (9D-2, 9D-6, 9D-7, 9D18, 9D-24, 9D-26, 9D-8, 9D-9, 9D-10, 9D-15, 9D-25, 9D-27, 9D-28, 9D-29, 9D-31); French (9D-2, 9E-10, 9E-12, 9E-14, 9E-15, 9E-17); Phys Ed (9F-5, 9F-11, 9F-15, 9F-17, 9F-20, 9F-22); Arts (9G-1, 9G-4, 9G-7, 9G-9, 9G-11, 9G-12, 9G-12, 9G-21)			
Low Priority (1)				Communicate to express yourself & your ideas. A little bit of group work & contributing. Some citizenship study. Math (9A-10, 9A-12, 9A-21, 9A-22, 9A-23, 9A-30); Language 9B-2, 9B-3, 9B-6, 9B-13, 9B-16, 9B-24, 9B-25, 9B-26, 9B-30, 9B-31); H&G (9C-1, 9C-3, 9C-7, 9C-9, 9C-12, 9C-15); Science (9D-10); French (9E-2, 9E-11, 9E-15, 9E-19); Phys Ed (9F-11, 9F-18, 9F-20, 9F-22, 9F-23, 9F-24); Arts (9G-1, 9G-7, 9G-8, 9G-23, 9G-24, 9G-27, 9G-28)	Developing positive attitudes to school work & skill attainment. Build strong personal values, independence. In Art - aesthetics. See Math (9A-7, 9A-10, 9A-28, 9A-33, 9A-37); Language (9B-3, 9B-7, 9B-12, 9B-17, 9B-18, 9B-20, 9B-23, 9B-24, 9B-29); H&G (9C-1, 9C-12); Science (9D-1, 9D-5, 9D-9); French (9E-2, 9E-17); Phys Ed (9F-1, 9F-2, 9F-4, 9F-5, 9F-8, 9F-11, 9F-15, 9F-17, 9F-18, 9F-20, 9F-22); Arts (9G-1, 9G-4, 9G-7, 9G-10, 9G-12, 9G-12, 9G-18, 9G-22, 9G-23, 9G-24, 9G-25, 9G-27)	Fairly broad principles - lifelong learning, globalism, looking for bias, read media, tolerance, environmentalism. See Math (9A-1, 9A-7, 9A-10, 9A-32); English (9B-1, 9B-18, 9B-20, 9B-24, 9B-28, 9B-32-37); H&G (9C-1, 9C-3, 9C-7, 9C-52, 9C-8, 9C-11, 9C-15, 9C-25, 9C-26, 9C-27, 9C-31, 9C-36, 9C-37, 9C-38, 9C-39, 9C-41, 9C-54, 9C-29, 9C-32, 9C-33, 9C-36, 9C-37, 9C-38, 9C-39, 9C-41, 9C-43, 9C-52, 9C-53, 9C-48, 9C-49); Science (9D-1, 9D-3, 9D-4, 9D-5, 9D-6, 9D-23, 9D-7, 9D-18, 9D-8, 9D-9, 9D-10, 9D-12, 9D-25, 9D-26, 9D-27, 9D-28, 9D-31); French (9E-1, 9D-5, 9E-15, 9D-7); Phys Ed (9F-1, 9F-2, 9F-17, 9F-20); Arts - (9G-1, 9G-7, 9G-8, 9G-12, 9G-16, 9G-17, 9G-18, 9G-20, 9G-21, 9G-27, 9G-22, 9G-25, 9G-28)
(0)						

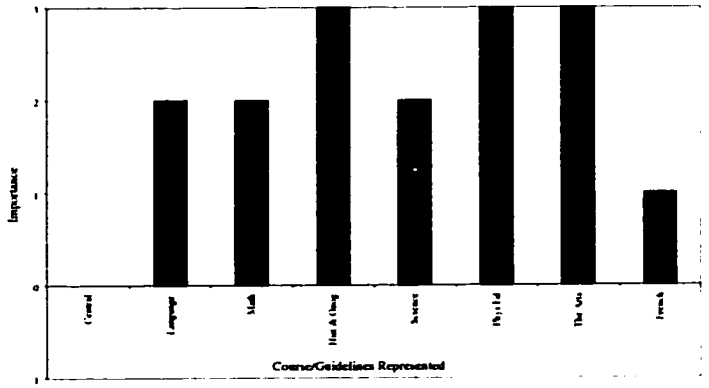
Figure 9.1 - Elements Used During Integration (Dimension A) in Period 9

Analysis of Elements Used During Integration (Dimension A) by Sub-dimension in Period 9

Content

In stark contrast to the Common Curriculum, this period places a newfound accent on the transmission of content to the student. With a firm belief that students must necessarily internalization a certain body of "fundamental" common knowledge for them to function in later life, the Ministry greatly broadened the base of concrete information to be memorized (some of it brought down from higher grades) (9C-1, 9C-2, 9C-6, 9C-7, 9C-11, 9C-21). Rather than spread across the curriculum, however, these additions appear to pile up in subject-related niches (see table above), and fanned out in strands representing areas of knowledge. Based on the promises made by the Conservative administration, it is not unexpected that the traditionally "academic" subjects of English, Mathematics, Science, History and Geography all include a myriad of new concepts, vocabulary and facts to be assimilated. Nevertheless, it is somewhat surprising to see the subjects that had traditionally eschewed content (Physical Education, the Arts) embrace this change in venue, as well.

Figure 9.1.1 - The Importance of Content in Period 9

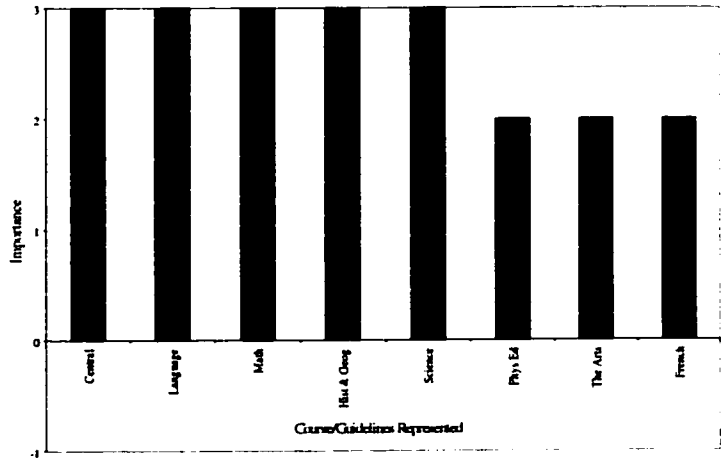


Academic Skills

Reminiscent of the Wells' proclamations of 1975, the Conservative manifesto *Excellence in Education* (1996) specifically stated that there would be a renewed focus on reading, writing, spelling, mathematical (9H-3), and a number of other "fundamental broad-based skills" (9H-5) in the new curriculum. Each accompanying guideline bears this assertion out - there appears a "rigorous" accent on skills. However, unlike the Wells period, there is no manifestation of the "-Across the Curriculum" mentality. Rather, like content, many skills are segregated into their assigned subject with not much cross-over to other areas. Perhaps the best example of this phenomenon can be seen in the Ministry's use

of Language skills. Mention is made by the Language guideline that they should be re-emphasized and reinforced throughout the entire curriculum (9B-4, 9B-10). However, compared to the previous three periods, there in fact appears to be a less central role for language study throughout the curriculum as a whole. When language is referred to by individual guidelines, they use it solely as a way of achieving better subject-centred results (see History, Geography, Science, the Arts). Mathematics, for instance, has its own "mathematical language" that students are to learn (9A-21, 9A-24, 9A-26). French does draw a vague connection between the two languages (9E-2, 9E-8, 9E-13) but it remains weak. Outside of this, the formalized "English" class appears to bear the brunt of the new mandatory language skills, squeezing them more efficiently into the available space in the time-table.[1]

Figure 9.1.2 - The Importance of Academic Skills in Period 9



The Mathematics guideline (9A-10, 9A-22, 9A-28, 9A-39) places great virtues on generic "problem solving" and "inquiry" skills. However, when applied throughout the curriculum to suit each subject specification, each guideline represents them more as a specific "way of knowing", with little reference to any interconnections with other areas. This can be seen especially when looking at the fairly narrow focused Historical (9C-1, 9C-2, 9C-17, 9C-26, 9C-27, 9C-31, 9C-34, 9C-36), Geographic (9C-4, 9C-13, 9C-45, 9C-46, 9C-47, 9C-43, 9C-54, 9C-559C-41), and Scientific inquiry skills (9D-2, 9D-4, 9D-5, 9D-7, 9D-20, 9D-21, 9D-24, 9D-28). The one fairly broad skill area that does appear to transcend subject boundaries is that related to computer literacy. The disappearance of a course actually dedicated to the study of "Computer Science" reflected the change in the Ministry's mentality - computers came to be seen as a tool for aiding subject work rather than an object of study in itself (see table above).

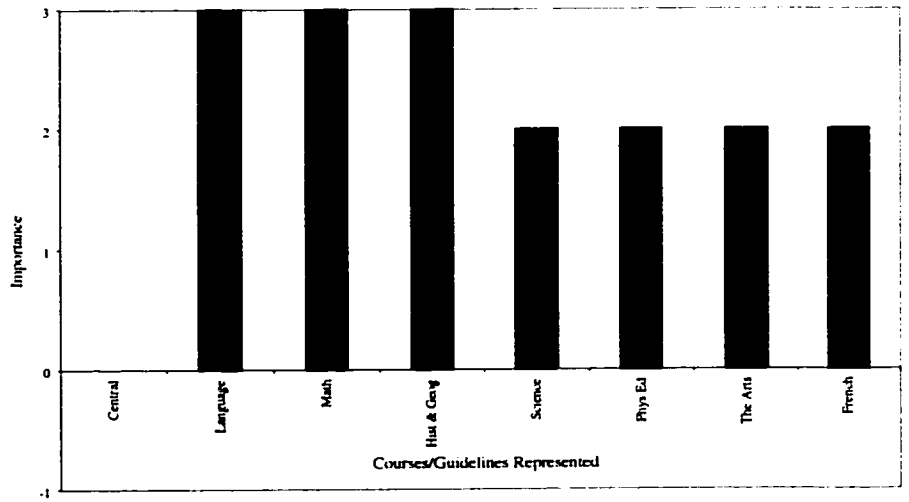
Practical/Manual Skills

The "rigorous curriculum" endeavours greatly to show students the relevance of abstract theories and concepts to their home-lives and the world around them. In turn, it expects that students should know how to apply these concepts "in complex real-world situations" (9A-9). The Mathematics guideline explains the interrelationship:

> Students must be capable of using their theoretical and practical knowledge of mathematics to solve problems and make decisions in everyday life. Growth in the ability to use mathematics to solve problems is gradual and continuous, beginning in Kindergarten and continuing through high school to graduation and beyond. It is through problem-solving activities which connect mathematics with the real world that students are able to realize the power and usefulness of mathematics. (9A-34)

This philosophy is applied uniformly throughout the various subject areas. Language continually explains the practical importance and applications of proper word use in a meaningful context (9B-2, 9B-11, 9B-16, 9B-17, 9B-28, 9B-30).

Figure 9.1.3 - The Importance of Manual Skills in Period 9



The History and Geography guideline attempts to relate to "the world outside the classroom" with a greater emphasis on the practical (9C-1, 9C-6, 9C-7, 9C-30, 9C-35, 9C-42, 9C-48, 9C-51), and a number of field trips into the community (9C-22). Science informs the teacher that he must look to the wider world to inspire and educate students: this is the reason why (according to Minister Dave Johnson at the guideline's unveiling) there was included the theoretical component (science) but also a technology component, covering practical application of those theories (see table). Breaking from tradition, the Arts

[1] This appears to be the same process used for mathematical skills

also requests teachers to try to show how the arts apply to everyday life (9G-9). Physical Education even promotes practical "Living Skills" to train students how to cope with everyday events, so that they can "apply these skills in ways that will be useful throughout their lives" (9F-22).

Vocational application is mentioned in most subjects, but receives only the barest of recognition. Math mentions some career options available to students (9A-14, 9A-10), and this is echoed in the Social Studies subjects (9C-56), Science (9D-2), French (9E-12), and the Arts (9G-11), but they seem strangely out of place. Language is perhaps the most enthusiastic, drawing links between communication and employment (9B-2, 9B-5, 9B-8, 9B-28, 9B-17). Even less popular, hands-on skills seem to be mentioned only in passing by most guidelines, and there is little cross-over of manual skills to more academic subjects. Math makes a vague mention of spatial sense when discussing geometry (9A-25), and Language suggests a limited amount of drawing to relate abstract words to students' own experiences (9B-29), but little more is said. There are a few links between practical skills as being a springboard to higher learning (in the more practically-minded subjects), but these are quite guarded. Scientific laboratory work (9D-9, 9D-10, 9D-31), physical fitness (9F-20), and artistic creation (9G-4) are all mentioned as ways of building a student's overall confidence in his abilities.

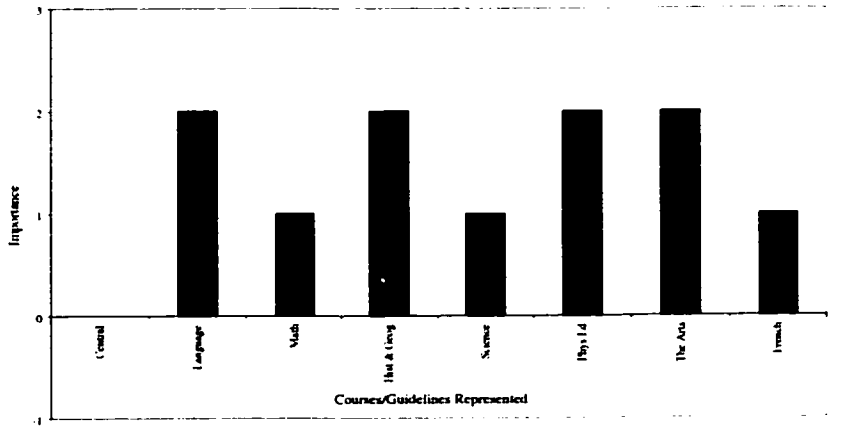
Social Skills

Unlike earlier periods that insisted social skills be learned solely through active participation on the part of the student (essentially through group work), the present guidelines handle student involvement far more gingerly. In most instances, guidelines are vague on the issue, seeming to leave specifics up to individual teachers. History, Geography and Science only state that students should work on their cooperative skills (9C-12, 9D-10). Mathematics and Language go further, stressing that students discuss each other's writing problems (9A-12, 9A-23, 9A-30, 9B-16), interact with one another in small and large group (9B-6, 9B-30, 9B-31, 9E-11, 9E-15), engage in brainstorming activities to generate ideas for writing (9B-13, 9E-19) or other cooperative learning activities (9B-25, 9B-26). Both Physical Education and the Arts take the stance that active participation will help interpersonal skills, learn teammanship and

etiquette, but that it is important to have students who can come to decisions both in a group and independently (9F-18, 9F-20, 9F-23, 9F-24, 9G-27).

Each subject guideline begins with approximately the same quotation - Students graduating from Ontario schools require the knowledge and skills gained from [subject in question] in order to function as informed citizens in a culturally diverse and independent world and to compete in a global economy (examples in 9C-1, 9G-1). However, most subjects only deal with the issue of citizenship only tangentially, leaving the bulk of responsibility to History (9C-3, 9C-7, 9C-9, 9C-15).

Figure 9.1.4 - The Importance of Social Skills in Period 9



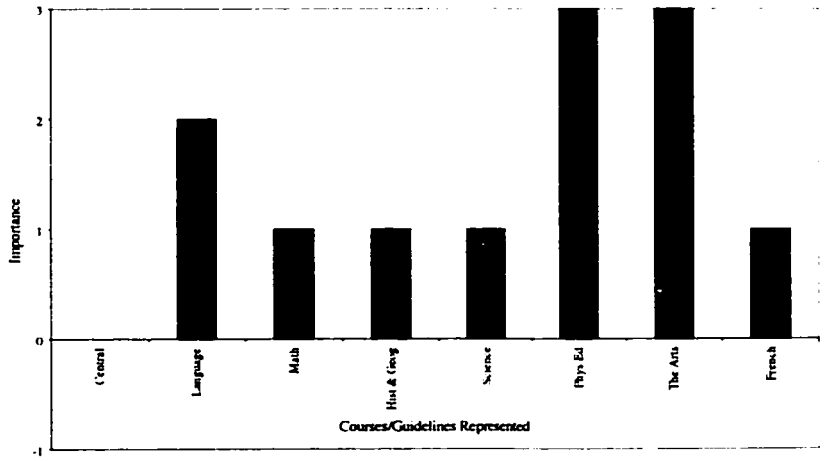
Individual Development

While the curriculum does take some role in character building in this period (not unlike the Common Curriculum), it in no way resembles the all-encompassing role played during the OSIS period. In fact, most core courses make little effort to touch on individual develop aside from those characteristics needed to help build academic or practical skills (such as the will to succeed, a mature attitude towards studying, etc.). Unlike many previous periods, even Language now deals almost exclusively with feelings and emotions that relate directly with writing and literature. It reasons that from a love of reading, people will come into contact with new ideas, develop a heightened sense of confidence, a higher aesthetic awareness of the beauty of words, and may lead to a greater capacity for independent thought (9B-7, 9B-12, 9B-17, 9B-20, 9B-23, 9B-24). As well, reading can be "among the most valuable resources students can take with them into adult life" (9B-18).

The two areas that become the informal purveyors of individual development are Physical Education and the Arts. Again, however, each chooses very specific aspects of the individual to dwell on.

The former tries to develop within students more practical aspects of time-management, goal setting, healthy choices and other various Life Skills rather than wrestling with any philosophical propositions. The reasoning is also quite pragmatic - to enhance the student's physical life and thereby making a healthier population that is less costly on the health care system (9F-2). The Arts also emphasize the development of certain characteristics that have traditionally fallen within their bailiwick. First, the guideline asserts that teachers should endeavour to bring out aesthetic qualities in students so that they may appreciate all forms of art. It is then the teacher's responsibility to aid the child's creative abilities by channelling them into one of the art forms and giving them the confidence to succeed (9G-4, 9G-7, 9G-12). Lastly, teachers must attempt to use the Arts to bring out students' emotions so that they may develop as full, creative human beings (9G-12, 9G-18) and through this - to understand themselves (9G-22, 9G-23) to be self-critical (9G-24), to be independent (9G-27).

Figure 9.1.5 - The Importance of Individual Development in Period 9



As is clearly evident, there is no real unified effort to deal with the students' more personal characteristics - the Harris Administration appears to feel that this is not the school's responsibility, but rather the family's (this is even explicitly mentioned in 9F-4).

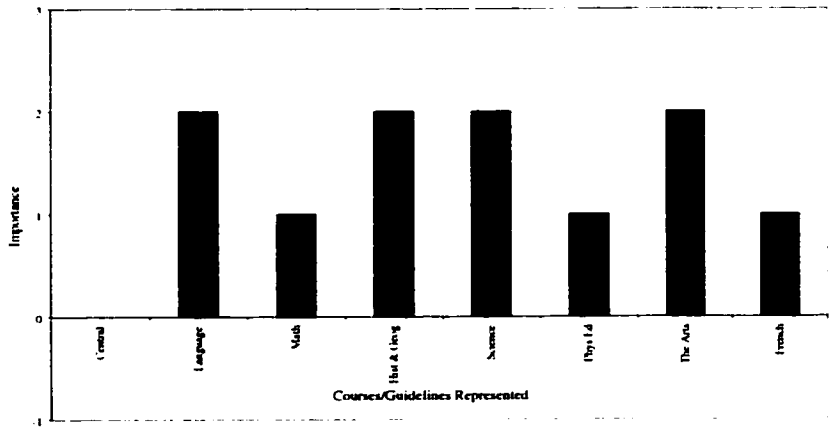
Underlying Principles

The underlying principles that had held sway for the past twenty-five years are barely mentioned and only weakly supported during this period. Multiculturalism, the towering belief of the Common Curriculum, now receives only brief mention in a few individual guidelines. The Arts remains the only

subject that gives great devotion to the concept, stating that teachers should look at the Arts of various cultures through history reflecting the diversity of Canada (9G-8, 9G-20, 9G-21, 9G-22, 9G-27, 9G-28). Environmentalism, as well, hold a much diminished position - it is only mentioned in Geography and Science. And here, rather than treating environmentalism as the "Great White Hope" of the future, takes a much more balanced approach of cause and effect, referring to the issue in language such as "sustainable growth (9D-7, 9D-8), "responsible environmentalism" (9C-15).

If any underlying message exists in this curriculum, it would have to do with the term "responsibility", and how teachers can instill this trait in the students. Of primary importance is the responsibility of the student (as layed out in a distinct section in each guideline) to "build strong personal values and positive attitudes towards [each subject] and towards learning in general" (9A-7, 9B-2, 9C-1, 9E-7). Beyond this, teachers are charged with showing students that they have a responsibility to keep Ontario and Canada strong. The guidelines mention repeatedly that the modern world is much more competitive now due to "globalism" and the "global Economy" (9A-1, 9C-49, 9G-1). While History is given the more specific task of instilling a feeling of emotional affinity with and loyalty to Canada's heritage, all the guidelines mention that students now have the responsibility of learning as much as possible and representing the country on the world stage.

Figure 9.1.6 - The Importance of Underlying Principles in Period 9



High Priority	skills and expectations over several courses. See Math (9A-11, 9A-12, 9A-13, 9A-20, 9A-25, 9A-30, 9A-33, 9A-39); English (9B-2, 9B-4, 9B-10, 9B-11, 9B-17, 9B-25, 9B-26, 9B-27, 9B-28); H&G (9C-2, 9C-13, 9C-19, 9C-23, 9C-53); Science (9D-1, 9D-4, 9D-6, 9D-7, 9D-8, 9D-13, 9D-15, 9D-16, 9D-21, 9D-23); French (9E-2, 9E-8); Phys Ed (9F-5, 9F-10, 9F-12); Arts (9G-6, 9G-8, 9G-9, 9G-18, 9G-20, 9G-21, 9G-22)			
Medium Priority (2)		Important to meet the student's interests and needs. Make experience relevant and meaningful. Help the student find his own unique interests. Fairly broad, though. See Math (9A-1, 9A-7, 9A-18, 9A-26, 9A-30, 9A-34, 9A-35, 9A-37, 9A-39); English (9B-4, 9B-7, 9B-11, 9B-12, 9B-17, 9B-18, 9B-26); H&G (9C-10, 9C-16, 9C-21, 9C-25, 9C-45); Science (9D-9, 9D-15, 9D-15, 9D-23, 9D-26, 9D-31); French (9E-7, 9E-11, 9E-17); Phys Ed (9F-8, 9F-10, 9F-18); Arts (9G-1, 9G-4)		
Low Priority (1)			Standardized school curriculum gives a unity to province. Learn about your place in workplace, citizenship. See Math (9A-1, 9A-2, 9A-10); English (9B-2); H&G (9C-1, 9C-3, 9C-15, 9C-21, 9C-22, 9C-25, 9C-33, 9C-39, 9C-41, 9C-52); Science (9D-1, 9D-3, 9E-14, 9E-17); Arts (9G-1, 9G-21)	Change revolves around economics - tech change, global economy, sustainable growth. See Language (9B-28); H&G (9C-1, 9C-3, 9C-15, 9C-42, 9C-49, 9C-52); Science (9D-6, 9D-7, 9D-18, 9D-25, 9D-26, 9D-27, 9D-28); French (9D-7); Phys Ed (9F-2, 9F-20, 9F-17)
0				

Figure 9.2 - Objectives of Integration (Dimension B) in Period 9

	Ministry	Board	School	Classroom
High Priority (3)	Ministry will give new rigorous curriculum with Province-wide standards, expectations, money to schools for computers, cut number of boards and reallocate money to schools, website. See Excellence (9H-3, 9H-4, 9H-5, 9H-7, 9H-8); H&G (9C-24); Science (9D-2); Phys Ed (9F-3, 9F-11); Arts (9G-2)			The relationship between Ministry and Teacher once more like the 1930s-40s. The teacher is considered a professional and should make decision about teaching strategies to best implement expectations. See Math (9A-7, 9A-36); Language (9B-6, 9B-7, 9B-8, 9B-9, 9B-11, 9B-21); H&G (9C-10, 9C-11, 9C-13); Science (9D-2, 9D-12); French (9D-7)
Medium (2)				
Low (1)			Vague reference that schools have hand in policy, certain programs. Site-based management promoted - money from boards to schools. See Excellence (9H-7) Language (9B-10); H&G (9C-24); Phys Ed (9F-3, 9F-6, 9F-7, 9F-12)	
Negligible (0)		Board - has some support role, but Ministry cuts much of their money, power, number. See Excellence (9H-5, 9H-7); Math (9A-3); Phys Ed (9F-6, 9F-7); Arts (9G-2)		

Figure 9.3 - Loci of Integration (Dimension C) in Period 9

			Vertical	Vertical	
High Priority (3)	The Ministry lays content, courses, strands, etc pretty rigidly layed out for each grade. Math (9A-21, 9A-27, 9A-22); H&G (9C-7, 9C-27, 9C-45, 9C-54); Science (9D-7, 9D-22); Arts (9G-13)				
Medium (2)		Curriculum linked as a building of expectations, content, etc, from Grades 1-8. See Math (9A-2, 9A-3, 9A-4, 9A-15); Language (9B-9, 9B-13); H&G (9C-3); Science (9D-20); French (9E-9, 9E-18); Arts (9G-2, 9G-13, 9G-14, 9G-19)			
Low (1)					Certain small vestiges, but not much. See Math (9A-38); Science (9D-15); French (9E-9)
Negligible (0)			No mention	No mention except Math (9A-34)	

Figure 9.4 - The Relationship of Grades 7-8 to the Other Grade Levels (Dimension D) in Period 9

Appendix D

Operational Definitions - The Teachers' Perspective

In analysing the written transcripts of teacher interviews, the levels established in the Ministry profiles was maintained. However, a slightly different criterion was necessary in assessing the levels of importance they place of the various dimensions. The levels of importance were, therefore, decided by the following operational definitions.

Profiles A, B, C, and D are broken into 4 Levels of priority - High, Medium, Low, and Negligible. These terms were operationally defined as follows:

High Priority: An element (e.g. in Profile A - Content, Academic Processes, Practical/Manual Skills, Social Skills, Individual Development, Underlying Principles) will be considered a high priority if a) the teacher enthusiastically and explicitly states that the item is of great importance, and that the teaching of this element is a high priority; ***AND*** b) examples exist within the transcript of this element being used by the teacher.

Medium Priority: An element will be considered a medium priority if a) the teacher explicitly states that the item is of importance, or that the teaching of this element is a high priority, but that this is not backed up by any supporting evidence; ***OR*** b) the teacher explicitly states that element is a medium priority; ***AND*** c) this is supported by an example of its use in the teacher's approach.

Low Priority: An element will be considered a low priority if a) the teacher explicitly states that the element is a low priority; ***OR*** b) the teacher deals with the element in only vague terms; ***OR*** c) the element is mentioned incidentally somewhere in the transcript as an example, illustration, or specification.

Negligible Priority: An element will be considered a negligible priority if the element a) is explictly described by the teacher as a negligible priority; ***OR*** b) is never mentioned throughout the transcript.

Profile E is broken into 4 Levels of Importance - Central, Localized, Incidental, and No Evidence. These terms will be used according to the following Operational Definitions:

Central Importance: An approach (nested, crossdisciplinary, fusion, thematic, etc...) will be considered of central importance if a) the teacher explicitly states that the approach is of great importance for education in general; ***AND*** b) gives more than one example of the way s/he has used it in their teaching situation. It will be designated as ***BLACK*** with a white font.

Localized Importance: An approach will be considered of localized importance if a) the Teacher explicitly states that the approach is of some importance for education in general; ***AND*** b) can only think of one subject-related example in which the approach may be used. It will be designated as ***DARK GREY***.

Incidental Importance: An approach will be considered of incidental importance if a) The Teacher vaguely or casually promotes the use of the approach; ***OR*** b) gives an example of the approach in passing. It will be designated as ***LIGHT GREY***.

No Evidence: An approach will be considered to not exist through lack of evidence if a) the teacher either makes no statement about education practices that resembles the approach or explicitly states that s/he has never used it; ***AND/OR*** b) no examples exist that relate to the use of that approach. It will be left as ***WHITE***.

Profile F is broken into 4 Levels of Hindrance - High, Fair, Vague, and No Evidence. These terms will be used according to the following Operational Definitions:

High Degree of Hindrance: The Teacher will be considered to have a high degree of implementation hindrance (e.g. subject attachment, speedy implementation...) if a) the teacher explicitly recognizes that the specific impediment is a problem towards the implementation process; ***AND*** b) vigorously advocates its removal, citing examples of the damage the blockage has incurred.

Fair Degree of Hindrance: The Teacher will be considered to have a fair degree of implementation hindrance if a) the teacher explicitly recognizes that the impediment may be a problem towards the implementation process; ***AND*** b) mentions the impediment once more in the form of an example, a warning, or a clarification.

Vague Evidence of Hindrance: The Teacher will be considered to have a vague degree of implementation impediment if a) the teacher implicitly hints at the impediment that may be causing them implementation problems; ***AND*** b) the impediment is not mentioned again.

No Evidence of Hindrance: The Teacher will be considered to have a no awareness of an implementation impediment if s/he makes no mention (explicitly or implicitly) of the impediment.

Profile G is broken into 4 Levels of Assistance - Actively Provides or Enlists, Actively Encourages, Passively Encourages, and No Evidence. These terms will be used according to the following Operational Definitions:

Actively Receives Assistance: The Teacher will be considered to be receiving assistance to the implementation process through certain aids (e.g. professional development, additional resources, etc...) if a) s/he explicitly states that s/he is being provided with the mentioned services; ***AND*** b) this aid is named again in the form of concrete examples of this assistance.

Actively Encouraged: The Teacher will be considered to be actively encouraged in the implementation process by certain aids if a) s/he explicitly states that s/he has been encouraged either through formal or informal incentives; ***AND*** b) gives concrete examples of these incentives.

Passively Encouraged: The Teacher will be considered to passively encouraged by other aids to the implementation process if s/he implicitly or in passing mentions incentives that s/he has received.

No Evidence of Encouragement: The Teacher will be considered unaware of assistance to the impediment if s/he gives no evidence to that effect.

Appendix E

INTERVIEW GUIDE for SCHOOL ADMINISTRATORS

The Meaning and Implementation of Integrated Curricula in the Transition Years: Ministry of Education Reforms and Current Practice in the Ontario School System

Principal Researcher: Kurt W. Clausen

Interview with _____

Date:_____

The following questions are based on the innovation profiles (see below) created from the theoretical work of Roland Case (1991) on curriculum integration, Andy Hargreaves et al (1996) and other educational scholars on planned change and implementation.

The Definition and Uses of Curriculum Integration

Section A: Forms of Integration

1. Please describe any curriculum integration approaches that have been undertaken at this school (either by your direct influence or by the teachers).

2. What new content have been introduced into the school curriculum as a result of this innovation (this would include facts, dates, names, etc...)?

3. What new skills have been introduced the school curriculum as a result of this innovation (such as reading, writing, math, computer skills)?

4. Do you feel that this innovation made the learning experience more relevant to the students?

5. Do you feel that this innovation taught the students the concepts of sharing or working within a group?

6. Were there any underlying principles that you wanted to show to the students using this technique that you felt would help them adapt to school life or society (i.e. democratic principles, multiculturalism, Christian ideals, etc...)?

Section B: Dimensions of Integration

1. Does the school program emphasize a strong link between grade levels? (i.e. "When we examine the relationship between the experiences provided in fourth grade arithmetic and in fifth grade arithmetic we are considering the vertical organization". Tyler, 1958, p. 107). How do you reinforce this linkage?

2. Do you see many attempts of teachers of various subjects within the same grade level combining their resources and talents. (For example, "When we consider the relationship between the experiences in fourth-grade arithmetic and fourth-grade social studies, or between the experiences..., we are considering the horizontal organization of learning experiences". Tyler, 1958, p.107)

Section C: Objectives or Purposes of Integration

What do you see as the main purpose for undertaking curriculum integration in your school?

1. Essentially subject-centred: the innovation's main purpose is to address issues that cannot not be packaged in existing subjects; to develop a wider view of subjects among students; to reflect "the seamless web of knowledge"; to increase efficiency and reduce redundancy.

2. Essentially student-centred: the innovation's main purpose is to mimic natural human method of learning; to improve student interest and growth; to empower student and allow self-directed learning. Students largely control the direction of the curriculum.

3. Essentially politically-centred: the innovation's main purpose is to "bring teachers together by bringing material together"; to encourage team teaching, professional cooperation, and to challenge the status quo by breaking subject barriers.

Section D: Modes of Integration

Which of the following methods of curriculum integration most closely resemble the methods that have been applied at your school:

Cross-disciplinary Approach: Aspects of one discipline are viewed from the perspective of another, such as a course devoted to the history of math (OECD, 1972).

Fusion: Refers to the joining together into a single entity curricular elements that were previously taught separately. History and Geography, for example, can be fused to create Social Studies (as a course, not a department) which in turn can be fused with English to create World Cultures or Society and Self (Case, 1991).

Harmonization: There is an agreement between subjects that certain skills, concepts will be taught throughout (Case, 1991).

Insertion: This refers to the adding of elements of one subject into a larger set, such as the inclusion of a novel into a history course (Case, 1991).

Interdisciplinary Approach: Several disciplines develop a problem, issue or theme that can run through the disciplines, and then participate in its delivery (OECD, 1972; ERIC, 1983).

Multidisciplinary Approach: implies drawing connections and noting parallels between subjects as they are taught side by side. An example of this approach would be teaching a Shakespeare play in English class as the Elizabethan period is taught in history (OECD, 1972).

Nested Approach: Within a certain subject, the teacher tries to systematically organize curriculum content and parts into a meaningful pattern (Fogarty, 1991).

Pluridisciplinary Approach: Assuming that certain disciplines are more or less related, teachers work and plan courses in a departmental setting. Examples of this approach are the creation of a social science department under one head teacher, team teaching (OECD, 1972) or the sharing of resources (Fogarty, 1991).

Transdisciplinary Approach: Beyond the scope of the disciplines. The approach starts with a problem and introduces knowledge only as it has importance in furthering the project at hand. Information and skills from the various disciplines are used but disciplinary boundaries are ignored (OECD, 1972).

If none of the above adequately define your experience - how would you describe it?

Section E: Loci of Integration

1. Where did the inspiration for this approach come from?
   The Ministry? The School Board?

   Yourself (the school administration)? Colleagues?

   The Teachers?

2. Which of the above parties aided this project (either through collaboration, distribution of reading materials, encouragement)?

The Implementation of Integrated Curricula

Section A: *Implementation Problems*

1. When this innovation was first tried, did you or any of the teachers feel uncomfortable about their stepping outside of the strict limitations of their discipline? If so, do you think this was due to individual background, training, self-confidence, etc..

2. Do you feel constrained to promote a traditional disciplinary mode in your school regardless of what recommendations or curriculum forms are issued forth from the Ministry due to university entrance requirements or other outside influences?

3. Have outside examinations (such as provincial standardized testing, school exams, etc...) hindered your attempts at curriculum integration. Has there been trouble testing students concerning this innovation.

4. Has the structure of the present curriculum and course outline hampered attempts at your school to implement this innovation?

5. Has parental feedback had an effect on this innovation at your school?

6. Do you feel there was excessive time pressure to implement this innovation? If so, from what source?

7. What time frame do you think is reasonable to implement this innovation?

8. Has attempting to do this project alienated anyone from sections of the school environment (esp. teachers and administration)? Why do you feel that this has happened?

9. Has this innovation caused a work overload? Do you feel this curriculum innovation was worth the work it entailed?

Section B: ***Increasing the Effectiveness of Curriculum Integration Implementation***

If you were starting this innovation again, which of the following do you think would be pivotal in improving this innovation and helping it to be widely accepted in your community. Please rate the following and explain your choices:

- more professional development and training in this area
- A need for acceptance by various stake-holders
- More adaptability on the part of the innovation
- Support from parents and the community
- Support from the school board
- Support from the Ministry
- The selection and utilization of an outstanding Role Model to lead the implementation process
- In creating the innovation, maximum input is allowed and encouraged from all key-stakeholders
- As the innovation is implemented and maintained, collaboration between teachers and students in the school environment is encouraged
- In you opionion, are there any other ways that may help the implementation of this innovation?

Final Question - Are there any points which you would like to add that you feel have been neglected in the above interview guide?

Appendix F

INTERVIEW GUIDE for TEACHERS

The Meaning and Implementation of Integrated Curricula in the Transition Years: Ministry of Education Reforms and Current Practice in the Ontario School System

Principal Researcher: Kurt W. Clausen

Interview with _____

Date:_____

The following questions are based on the innovation profiles (see below) created from the theoretical work of Roland Case (1991) on curriculum integration, Andy Hargreaves et al (1996) and other educational scholars on planned change and implementation.

The Definition and Uses of Curriculum Integration

Section A: Forms of Integration

1. Please describe any curriculum integration approach that you have undertaken at this school.

2. What new content have you introduced into your classroom as a result of this innovation (this would include facts, dates, names, etc...)?

3. What new skills have you introduced into your classroom as a result of this innovation (such as reading, writing, math, computer skills)?

4. Do you feel that this innovation made the learning experience more relevant to the students?

5. Do you feel that this innovation taught the students the concepts of sharing or working within a group?

6. Were there any underlying principles that you wanted to show to the students using this technique that you felt would help them adapt to school life or society (i.e. democratic principles, multiculturalism, Christian ideals, etc...)?

Section B: Dimensions of Integration

1. Do you have the same students over the grades 7-8 years? If so, would you keep a link over those two years (i.e. "When we examine the relationship between the experiences provided in fourth grade arithmetic and in fifth grade arithmetic we are considering the vertical organization". Tyler, 1958, p. 107)

2. Is this project a sole endeavour or does it cross several subjects within the same grade level. (For example, "When we consider the relationship between the experiences in fourth-grade arithmetic and fourth-grade social studies, or between the experiences...of the fourth-grader's experiences outside of school, we are considering the horizontal organization of learning experiences". Tyler, 1958, p.107)

Section C: Objectives or Purposes of Integration

What was your main purpose for undertaking this project?

1. Essentially subject-centred: the innovation's main purpose was to address issues that could not be packaged in existing subjects; to develop a wider view of subjects among students; to reflect "the seamless web of knowledge"; to increase efficiency and reduce redundancy.

2. Essentially student-centred: the innovation's main purpose was to mimic natural human method of learning; to improve student interest and growth; to empower student and allow self-directed learning. Students largely control the direction of the curriculum.

3. Essentially politically-centred: the innovation's main purpose was to "bring teachers together by bringing material together"; to encourage team teaching, professional cooperation, and to challenge the status quo by breaking subject barriers.

Section D: Modes of Integration

Which of the following methods of curriculum integration most closely resemble what you used:

Cross-disciplinary Approach: Aspects of one discipline are viewed from the perspective of another, such as a course devoted to the history of math (OECD, 1972).

Fusion: Refers to the joining together into a single entity curricular elements that were previously taught separately. History and Geography, for example, can be fused to create Social Studies (as a course, not a department) which in turn can be fused with English to create World Cultures or Society and Self (Case, 1991).

Harmonization: There is an agreement between subjects that certain skills, concepts will be taught throughout (Case, 1991).

Insertion: This refers to the adding of elements of one subject into a larger set, such as the inclusion of a novel into a history course (Case, 1991).

Interdisciplinary Approach: Several disciplines develop a problem, issue or theme that can run through the disciplines, and then participate in its delivery (OECD, 1972; ERIC, 1983).

Multidisciplinary Approach: implies drawing connections and noting parallels between subjects as they are taught side by side. An example of this approach would be teaching a Shakespeare play in English class as the Elizabethan period is taught in history (OECD, 1972).

Nested Approach: Within a certain subject, the teacher tries to systematically organize curriculum content and parts into a meaningful pattern (Fogarty, 1991).

Pluridisciplinary Approach: Assuming that certain disciplines are more or less related, teachers work and plan courses in a departmental setting. Examples of this approach are the creation of a social science department under one head teacher, team teaching (OECD, 1972) or the sharing of resources (Fogarty, 1991).

Transdisciplinary Approach: Beyond the scope of the disciplines. The approach starts with a problem and introduces knowledge only as it has importance in furthering the project at hand. Information and skills from the various disciplines are used but disciplinary boundaries are ignored (OECD, 1972).

If none of the above adequately define your innovation - how would you describe it?

Section E: Loci of Integration

1. Where did you get the inspiration for this project?

2. Who aided this project (either through collaboration, distribution of reading materials, encouragement)?

The Ministry?	The School Board?
The School Administration?	Colleagues?
Yourself?	

The Implementation of Integrated Curricula

Section A: ***Implementation Problems***

1. When you began this project did you feel uncomfortable about stepping outside of the strict limitations of your discipline? If so, do you think this was due to your individual background, your training, self-confidence, etc..

2. Do you feel constrained to teach in the traditional disciplinary mode regardless of what recommendations or curriculum forms are issued forth from the Ministry due to university entrance requirements or other outside influences?

3. Have outside examinations (such as provincial standardized testing, school exams, etc...) hindered your attempts at curriculum integration. Have you had trouble testing students concerning this innovation.

4. Has the structure of the present curriculum and course outline hampered your innovation and your teaching methods?

5. Has parental feedback had an effect on your innovation?

6. Do you feel there was excessive time pressure on you to implement this innovation? If so, from what source?

7. What time frame do you think is reasonable to implement this innovation?

8. Has attempting to do this project alienated you from any sections of the school environment (esp. teachers and administration)? Why do you feel that this has happened?

9. Has this innovation caused a work overload? Do you feel this curriculum innovation was worth the work it entailed?

Section B: ***Increasing the Effectiveness of Curriculum Integration Implementation***

If you were starting this innovation again, which of the following do you think would be pivotal in improving this innovation and helping it to be widely accepted in your community. Please rate the following:

- more professional development and training in this area
- A need for acceptance by various stake-holders
- More adaptability on the part of the innovation
- Support from your Principal
- Support from parents and the community
- Support from the school board
- Support from the Ministry
- The selection and utilization of an outstanding Role Model to lead the implementation process
- In creating the innovation, maximum input is allowed and encouraged from all key-stakeholders
- As the innovation is implemented and maintained, collaboration between teachers and students in the school environment is encouraged
- In you opionion, are there any other ways that may help the implementation of your innovation?

Final Question - Has this interview ignored any areas of Curriculum Integration in which you have been involved?

Appendix G

Interview Dates

School	Participant	Date	Time
1	Vice-Principal MCR/a	January 27, 1999	2:00 - 2:40pm
	Teacher MCR/b	January 26, 1999	9:00 - 10:10am
	Teacher MCR/c	January 26, 1999	10:15 - 11:10am
	Teacher MCR/d	January 26, 1999	12:30 - 1:30pm
	Teacher MCR/e	January 26, 1999	2:00 - 3:00pm
	Teacher MCR/f	January 27, 1999	9:00 - 10:00am
	Teacher MCR/g	January 27, 1999	10:15 - 11:10am
	Teacher MCR/h	January 27, 1999	12:30 - 1:30pm
2	Principal ECU/a	February 18, 1999	2:30 - 3:15pm
	Teacher ECU/b	February 18, 1999	12:00 - 1:00pm
	Teacher ECU/c	February 18, 1999	9:00 - 10:00am
	Teacher ECU/d	February 19, 1999	9:00 - 10:00am
	Teacher ECU/e	February 19, 1999	1:15 - 2:10pm
	Teacher ECU/f	February 19, 1999	10:00 - 11:00am
3	Principal MPU/a	November 23, 1998	10:00 - 11:00am
	Teacher MPU/b	February 15, 1999	10:40-11:40am
	Teacher MPU/c	February 15, 1999	12:30 - 1:30pm
	Teacher MPU/d	February 15, 1999	1:45 - 2:30pm
4	Principal ECR/a	January 29, 1999	9:00-9:40am
	Teacher ECR/b	January 29, 1999	9:40 - 10:30am
	Teacher ECR/c	January 29, 1999	11:00am - 12:10pm
	Teacher ECR/d	January 29, 1999	1:30 - 2:15pm
	Teacher ECR/e	January 29, 1999	2:30 - 3:20pm
5	Principal EPR/a	February 4, 1999	11:00am - 12:10pm
	Teacher EPR/b	February 4, 1999	9:00 - 10:00am
	Teacher EPR/c	February 4, 1999	10:00 - 11:00am
6	Principal MCU/a	March 1, 1999	10:00 - 11:00am
	Teacher MCU/b	March 1, 1999	11:15am - 12:00pm
	Teacher MCU/c	March 1, 1999	1:45 - 2:30pm
	Teacher MCU/d	March 1, 1999	12:30 - 1:15pm
	Teacher MCU/e	March 2, 1999	7:15 - 8:10am
7	Principal JOPR/a	April 15, 1999	12:00 - 1:00pm
	Teacher JOPR/b	April 12, 1999	11:00 - 12:15pm
	Teacher JOPR/c	April 15, 1999	1:00 - 1:45pm
	Teacher JOPR/d	April 15, 1999	2:15 - 3:10pm
	Teacher JOPR/e	April 21, 1999	11:00 - 12:00pm
	Teacher JOPR/f	April 21, 1999	12:45 - 1:45pm
8	Principal EPU/a	May 11, 1999	1:00 - 1:30pm
	Teacher EPU/b	May 11, 1999	9:00 - 10:00pm
	Teacher EPU/c	May 11, 1999	11:15am - 12:00pm
	Teacher EPU/d	May 11, 1999	2:15-3:00pm
	Teacher EPU/e	May 12, 1999	9:45 - 10:30am
	Teacher EPU/f	May 18, 1999	1:30 - 2:30pm

Appendix H

Participant Codified Response List

Dimension A

	Content	Academic Skills	Manual Skills	Social Skills	Individual Development	Underlying Principles
MCR/a	Negligible 16	Negligible -	Negligible -	Negligible -	Medium 1	Medium (1)
MCR/b	Low 10	Low 8, 11	Medium 1, 9, 16, 17	Low 11	Medium 10, 15	High 1, 4, 5, 11
MCR/c	Low 1	Medium 1	High 1, 16	Low 16, 31	Medium 5	Negligible 9
MCR/d	Medium 4	High 2, 4	Medium 2, 6, 7	Low 8	Negligible -	Medium 2, 3, 9
MCR/e	Low 1, 7	High 1, 2, 5, 20, 21, 22	High 3, 6, 20	Low -	Negligible -	Medium 1, 6, 28
MCR/f	Negligible -	High 2, 3, 4, 7	Medium 5	High 6, 22, 36	Low 22	Medium 7, 8, 33, 34, 36
MCR/g	Low 1, 2	High 1, 2, 5	Medium 3, 5	Low 4, 5	Medium 5	Negligible -
MCR/h	Low 4, 36	High 3, 4, 7	High 3, 4, 5, 11	Medium 6	Negligible -	Low 7
ECU/a	Negligible -	Negligible -	Negligible -	Negligible -	Negligible -	Medium 13
ECU/b	Medium 2, 7, 8	High 3, 7, 8, 14	Low 4, 7, 14	Medium 5, 7, 8	Negligible -	Low 6, 7
ECU/c	Low 2, 7	High 3, 7	Medium 4	High 5, 7	Medium 21	Medium 6, 7
ECU/d	Low 4	High 1, 4, 10	Medium 5, 7	Medium 1, 5, 19	Medium 1, 5	Medium 4
ECU/e	Medium 1, 2	Medium 3, 11	Medium 5	Medium 6	High 8, 9	Medium 7
ECU/f	Low 4	High 5, 9	High 1, 4, 6, 9, 14	Medium 7, 9, 25	Negligible -	Low 8, 9, 14
MPU/a	Low 2, 3, 17	High 1, 3	Low 5	Medium 1, 7	Low 1	Low 6
MPU/b	Low 9, 14, 48	Medium 5, 10, 11, 12, 14	High 5, 14	Low 56	High 7, 12, 14, 19	Negligible 8
MPU/c	Low 3	Medium 1, 5	High 1, 16, 22	Medium 1, 3, 7	Low 8	Low 1, 9
MPU/d	Low 4, 5, 6	Medium 4, 5, 6	Medium 3, 5, 6, 7, 8, 9, 10	Medium 10	High 10, 11, 14	High 11, 12, 13
ECR/a	Low 1	High 1	Medium 1	Negligible -	Negligible -	Medium 2
ECR/b	Medium 2, 9	High 2, 9	Medium 2, 4	Low 5, 8, 13, 26	Low 13	Medium 6, 7
ECR/c	Medium 2, 3	Medium 2, 3	High 1, 4, 13, 20	Low 5	Negligible -	Low 6
ECR/d	Low 2	High 3	Low 4	High 5, 6, 7	Negligible -	Low 7
ECR/e	Medium 7	High 2, 7	Low 3, 7	Medium 4	Negligible -	Medium 5, 7
EPR/a	Low 2, 4	High 4	Medium 4	Medium 4, 6, 21	Medium 6, 7	Negligible 5
EPR/b	Medium 7, 15	High 4, 5, 14, 15	High 2, 6, 14	Medium 6, 14, 15	Negligible -	Low 7
EPR/c	Medium 2, 4, 5	High 2, 5, 20	High 6, 7, 24	Medium 3	Negligible -	Negligible 4, 5
MCU/a	Negligible -	Negligible -	Negligible -	Negligible -	Negligible -	Medium 6
MCU/b	Low 3, 4	Medium 3, 4	High 5, 6, 8	Medium 1, 7, 8	Low 7	High 1, 6, 8, 16
MCU/c	Medium 1, 7	Medium 3, 7	High 4, 7	Low 5, 7	Negligible -	Low 6, 7, 19

MCU/d	Medium 2, 3, 4, 10	High 1, 2, 4, 10, 25	Low 2, 8, 16	High 5, 6, 18, 25	High 7, 9	Low 9, 35
MCU/e	Low 2, 10	High 4, 5, 10	High 4, 6, 7, 9, 10	Medium 8, 10	Medium 11	Low 12
JOPR/a	Low 6	High 1, 7	Medium 1, 8	Low 9	Medium 9	Medium 10, 11, 12, 13
JOPR/b	Low 2, 5, 6, 12	High 1, 2, 5, 7, 13	High 1, 2, 8, 9, 14, 40	Medium 3, 10	High 3, 5, 16	Negligible 4, 11, 15
JOPR/c	Negligible 1	Medium 1, 2	High 1	Medium 1	Low 1	Low 1, 2
JOPR/d	Medium 2	Low 1, 2	Low 2, 3, 4	Medium 5	Low 6	Medium 7, 8
JOPR/e	Low 3	Medium 5	Medium 5, 6, 8	High 3, 6, 7	High 6, 9	Low 3
JOPR/f	High 2	High 3	Medium 4, 5, 6	Low 7	Low 9, 10	Low 11
EPU/a	Negligible -	No -	Low 9	Medium 1	Medium 7	Medium 8
EPU/b	Low 2, 10, 14	High 2, 4	Medium 3, 5, 6, 15	Medium 4, 9	Low 5	Medium 7, 8
EPU/c	Negligible -	Medium 7	Medium 8, 9	Medium 10	Medium 11	High 6
EPU/d	Low 8	High 8	Medium 7, 11	Negligible -	High 9	Negligible -
EPU/e	Low 6	High 1, 7	Medium 4	Medium 19, 23	Medium 14	High 4, 7, 13, 14
EPU/f	Negligible -	High 19, 39, 40	High 1, 12, 13, 18, 19	Medium 11	Medium 25, 34, 35, 39	Negligible -

Dimension B

	Subject Centred Integration	Student Centred Integration	Social Continuity	Political Change
MCR/a	Low 5	High 1, 5	Negligible -	Low 5
MCR/b	Low 10	Medium 11	Negligible -	High 11
MCR/c	High 1, 4	Medium 1, 5, 17	Negligible 4, 6	Neglible 6
MCR/d	High 2, 4, 6, 13	Medium 6, 13	Negligible -	Negligible 21
MCR/e	Low 1	High 3, 6, 8, 12, 13, 15	Low 6	Negligible 14
MCR/f	High 1, 3, 7, 14, 17, 22	Medium 1, 16, 17	Low 15, 36	Negligible -
MCR/g	Medium 8, 9, 10	Medium 8, 9, 21	Negligible 8	Negligible -
MCR/h	Medium 3, 5, 11	High 11	Negligible -	Negligible -
ECU/a	Medium 1	High 7	Negligible -	Negligible -
ECU/b	High 1, 11	Medium 11, 23	Negligible 11	Negligible -
ECU/c	Medium 1, 10	Medium 10	Low 10	Negligible -
ECU/d	High 1, 7, 8	Medium 1, 7, 8	Negligible -	Negligible -
ECU/e	Medium 1, 2, 3	High 8, 11	Negligible -	Negligible -
ECU/f	High 1, 11, 12, 15, 25	Medium 4, 11, 15	Negligible -	Negligible -
MPU/a	High 1, 2, 3, 13	Low 1, 5, 14	Low 15	Negligible -
MPU/b	Medium 1, 2, 4, 5, 15, 18, 37	High 5, 14, 19, 24	Low 15	Negligible 18

MPU/c	Medium 1, 4, 11, 13, 14, 22	High 10, 16, 22, 23	Negligible 22	Negligible -
MPU/d	Medium 14, 15	High 3, 5, 16	Negligible -	Negligible 1
ECR/a	High 2, 6	Medium 5, 6, 7	Negligible -	Negligible -
ECR/b	High 2, 3, 4,13, 14, 16, 30	Low 16	Negligible 25	Negligible -
ECR/c	High 1, 7	Medium 4, 13	Negligible -	Negligible -
ECR/d	High 1	Medium 13, 15	Negligible -	Negligible -
ECR/e	High 13, 14	Medium 13, 14	Negligible -	Negligible -
EPR/a	High 12, 13	Low 10, 11, 13	Negligible -	Low 10
EPR/b	High 2, 3, 11	Medium 1, 7, 9	Negligible -	Negligible -
EPR/c	High 10, 11, 20	Low 6, 12, 24	Negligible -	Negligible 13
MCU/a	High 10	Low 10	Low 10	Negligible -
MCU/b	Medium 15, 16	Medium 15, 16, 34	Negligible -	High 15, 16
MCU/c	Low 14	High 14	Low 14	Negligible -
MCU/d	Medium 22, 23, 24, 40	High 19, 20, 21, 24, 25	Low 22, 23	Negligible -
MCU/e	High 1, 21, 23	Low 7, 23	Negligible -	Negligible -
JOPR/a	High 1, 18	Medium 1, 9	Negligible -	Negligible -
JOPR/b	Low 21, 47	High 21, 31	Negligible -	Negligible -
JOPR/c	High 3, 9	Negligible -	Negligible -	Negligible -
JOPR/d	High 1, 2, 10	Low 10	Negligible -	Negligible -
JOPR/e	High 11	Low 11	Negligible -	Negligible -
JOPR/f	High 13	Low 13	Negligible -	High 16
EPU/a	High 1	Medium 1	Negligible -	Negligible -
EPU/b	Low 15	High 5, 14, 15	Negligible -	Low 14
EPU/c	Medium 1, 4, 5, 15, 18	High 15, 22	Negligible -	Negligible -
EPU/d	High 1, 6	Medium 11, 19	Negligible -	Negligible -
EPU/e	Negligible -	High 4, 6, 7, 12, 13, 14, 15, 16	Negligible -	 13
EPU/f	Low 3, 4, 23, 24, 27, 28, 29, 31	Medium 1, 13, 39	Negligible 1	Negligible 1

Dimension C

	Ministry	Board	School	Classroom	Other
MCR/a	Medium 12, 15	Low 12	Medium 12	High 12	Negligible -
MCR/b	Negligible 24, 36	Negligible 24, 36	Low 9, 24	High 24	High 7, 22
MCR/c	Medium 17	Negligible 19	High 18	Low 17	Negligible -
MCR/d	Low 2, 4, 5	Negligible -	Medium 4, 17	High 2, 4, 5	Negligible -
MCR/e	Low 19	Negligible -	Medium 4, 9, 19, 20	Medium 4	Low 25
MCR/f	Low 20, 27	Low 21	High 9, 10, 20, 21, 31, 33, 34, 36	Medium 9, 10, 20, 27	Low 23
MCR/g	Negligible 21, 23	Negligible -	Negligible 7, 21	High 7, 21	Medium 26
MCR/h	Low 19, 20, 27	Low 28	High 10, 29	High 10, 21, 25, 26, 29	Low 25
ECU/a	Low 1	Negligible -	Medium 1, 4, 15	High 11, 12	Negligible -
ECU/b	Low 24, 25	Negligible 27	Low 9, 28, 29	High 9, 23, 25, 26	Negligible -
ECU/c	Low 25	Negligible -	Low 8	High 9, 16, 23, 25	Negligible -
ECU/d	Negligible -	Negligible -	Medium 21	Medium 2, 3	Medium 21
ECU/e	Low 10	Negligible -	Negligible -	Negligible 10	Negligible -
ECU/f	Negligible -	Negligible -	Negligible 10	Negligible -	High 26
MPU/a	Medium 25	Medium 26	High 25, 26	Negligible -	Negligible -
MPU/b	Low 1, 2, 3, 43	Negligible -	Low 44, 45, 53, 54	High 38, 39, 40, 42, 43	Negligible -
MPU/c	Low 15, 34	Negligible 35	High 12, 18, 20, 21, 31, 36, 37, 38	Medium 38	Negligible -
MPU/d	Low 25	Low 2, 3, 25	Low 15	High 30, 31	Negligible -
ECR/a	Negligible 1, 17	Low 18	High 1, 18, 25	Negligible -	Negligible -
ECR/b	Negligible -	Low 34	Medium 26, 34, 35	High 17, 18, 19, 20, 36	Negligible -
ECR/c	Low 23	Negligible -	High 8, 9, 11, 12, 23	Negligible -	Medium 23
ECR/d	Negligible -	Negligible -	Medium 8, 25	Medium 25	Negligible -
ECR/e	Medium 23	Low 5	Low 24	High 1, 24	Negligible -
EPR/a	Low 20	Low 20	High 1, 8, 19, 21	Medium 9, 22	Negligible -
EPR/b	Medium 1, 2, 24	Negligible 9, 25, 26	High 10	High 23	Negligible -
EPR/c	Medium 24, 40, 41	Negligible -	High 1	High 1	Negligible -
MCU/a	Low 18	Low 18	High 3, 18	Negligible -	Negligible -
MCU/b	Negligible -	Low 25	Medium 13, 14, 24	High 22, 23, 24, 25	Negligible -
MCU/c	Medium 1	Low 2	Medium 8, 9, 10, 11, 12	High 28	Negligible -
MCU/d	Low 38	Medium 12, 38	Medium 11, 12, 17, 18	High 38, 42, 43, 45	Negligible -
MCU/e	High 2, 33	Medium 33	Medium 14, 17, 18, 19, 20, 33	Low 3	Negligible -
JOPR/a	Negligible 28	Negligible -	Medium 2, 5	Negligible -	Negligible -
JOPR/b	Negligible -	Negligible -	Medium 20, 38, 49, 50	High 22, 23, 24, 25, 26, 41	Medium 41

JOPR/c	Negligible 22	Negligible -	Medium 8, 22	Medium 7, 22	Medium 22
JOPR/d	Negligible -	Negligible -	High 1, 9, 20	Medium 1, 9	Negligible -
JOPR/e	Negligible -	Negligible -	High 10	Negligible -	Negligible -
JOPR/f	Negligible -	Negligible -	Medium 6, 23	High -	Negligible -
EPU/a	Negligible -	Negligible -	High 6	Negligible -	Negligible -
EPU/b	Negligible 28	Negligible -	Low 11, 12, 13	Medium 16	High 27
EPU/c	Negligible -	Negligible -	High 3, 14, 22	Medium -	Negligible -
EPU/d	Negligible -	Negligible -	High 10, 19	Negligible -	Negligible -
EPU/e	Negligible -	Negligible -	Low 9, 10, 11,21	High 1, 2, 3	Negligible -
EPU/f	Low 22, 33	Negligible 22	Medium 6, 7, 8, 22, 32, 33	High 1, 2, 8, 9, 15, 38, 39	Negligible -

Dimension D

	Horizontal	Downward	Upward	Vertical	Insular
MCR/a	Negligible -	-	Medium 12	-	High 2, 3
MCR/b	High -	-	-	-	Medium 8
MCR/c	High 2	-	-	-	Low 2
MCR/d	Medium 1	-	Low 11	Negligible 10	Medium 10, 12
MCR/e	High -	9	-	-	Medium 9
MCR/f	High 9, 11	Low 34, 35	Medium 18	Negligible 33, 34	Medium 9, 10, 34, 35
MCR/g	Negligible -	-	-	-	Medium 6
MCR/h	High 10	-	-	-	Medium 8, 9
ECU/a	Medium 4, 5	Medium 1, 4	-	-	High 1, 4
ECU/b	High 10	-	-	-	Low 10
ECU/c	High -	Negligible 8	-	-	Medium 5, 8
ECU/d	High -	Medium -	-	-	Low 5
ECU/e	Negligible -	Medium -	High 10	-	-
ECU/f	High -	-	-	-	-
MPU/a	High -	Low 8	Medium 8	Low 8, 9	High 1, 8
MPU/b	High 16	-	-	-	High 16, 20
MPU/c	High 12, 17, 20	Medium 20, 33	Medium 19	Low 19	Medium 12
MPU/d	High 15	-	-	-	-
ECR/a	Medium 1	-	-	-	High 1, 3, 27
ECR/b	High 10	Medium 12, 13	-	-	Low 10

ECR/c	Medium 10	-	-	-	High 10, 19
ECR/d	Medium 14	-	-	-	High 8, 14, 21, 33
ECR/e	High -	-	Low -	-	Medium 9, 11
EPR/a	High 3	-	-	-	High 1, 3
EPR/b	High 8	-	-	-	High 8
EPR/c	High 8, 9, 35	-	-	-	High 8, 35
MCU/a	High 7	-	-	-	Low 7, 8, 9
MCU/b	High 10, 11	-	-	-	-
MCU/c	High -	-	-	-	Medium 8
MCU/d	High -	-	-	-	Medium 1, 12, 13
MCU/e	High 13	-	Low 15, 16	-	Medium -
JOPR/a	Negligible -	-	-	High 5, 14, 15, 16	Medium 3, 4
JOPR/b	High -	Low 1	-	-	Medium 16, 18, 19
JOPR/c	Negligible -	-	-	-	Medium 2, 4, 5, 6
JOPR/d	High -	9	-	-	Medium -
JOPR/e	Medium -	-	-	Medium 1	Medium 10
JOPR/f	Medium 12	-	Medium 13, 20, 21	Medium 23	Medium -
EPU/a	Negligible -	-	-	-	Medium -
EPU/b	High 13	-	Low 11, 12	-	Low 11
EPU/c	High -	-	-	-	Medium 12, 13
EPU/d	High 10	-	-	-	Negligible -
EPU/e	Negligible -	Low 8	-	-	Low 19, 20
EPU/f	High 5	Negligible -	-	-	Negligible -

Dimension E

	Nested	Cross	Multi	Correlate – Insert	Pluri	Fusion	Thematic	Harmonize	Trans
MCR/a	Nil -	Nil -	Low 9	Medium 7	Low 4, 10	Nil 6	Medium 8	Medium 5	Nil 11
MCR/b	Low 19	Low 12	Nil 18	Nil -	Low 20	Low 13	High 16	Low 14	Nil 21
MCR/c	Low 13	Low 7	Low 12, 14	Low 10	Medium 14	Nil 8	High 3, 11, 16, 31	Nil 9	Nil 15
MCR/d	Medium 20, 22	Low 14	Low 19, 26	Medium 4, 15	Nil -	Nil 16	Low 6, 8, 18, 25	Medium 17	Nil 23
MCR/e	Nil -	Medium 12, 20	Medium 4, 18	Low 3, 13, 17, 20	Nil -	Nil -	Medium 16	Medium 16	Nil -
MCR/f	Medium 9, 10, 18	Medium 2, 3, 14	Low 9	Medium 5, 13, 18	Low 9, 23, 31	Low 18	High 1, 4, 14, 19, 22	Low 3, 4, 9, 14	Nil -
MCR/g	Low 17	Nil 1, 11	Low 16	Low 14	Nil 18	Nil 12	High 1, 15, 20	High 10, 13	Nil 19
MCR/h	Low 18	Low 12	Medium 17	Low 13, 15	Low 10, 23	Low 13	Medium 16	Medium 14	Low 24
ECU/a	Nil -	Low 8	Medium 15	Low 8	Low 16	Nil 9	Low 14	Low 13	Nil 17
ECU/b	Low 20	High 3, 12, 19, 30	Medium 2, 9	Medium 12, 13, 14, 16	Low 21, 39	Nil -	Medium 14, 18	Low 3, 17	Low 22
ECU/c	High 19	Low 12	High 8, 18	Low 14, 15	Low 20	Low 11, 13	Low 10, 17	Nil -	Medium 21
ECU/d	Medium 16	High 2, 7, 9	Medium 15	Low 1, 3, 20	Low 17	Low 10, 11	Medium 1, 2, 7, 14	Medium 12	Low 18, 19
ECU/e	Medium 11	Low 4	Nil -	Low 3	Nil -	Nil -	Nil -	Nil -	Nil 24
ECU/f	Nil 22	Low 13	High 10, 19, 20, 21	Low 13, 17, 21	Low 23	Nil 2, 15	Medium 6, 18	Medium 15, 16	Nil 25
MPU/a	High 18, 22	Nil 17	Low 4, 21	Low 3, 19	Nil 23	Nil 17	Medium 1, 4, 6, 20, 27	High 18	Nil 24
MPU/b	Low 16, 33	Medium 14, 27	Nil 32	Medium 14, 30, 37, 39	Low 34	Nil 28	Medium 1, 4, 17, 31, 37	Nil 29	Low 17, 36, 37
MPU/c	Medium 19, 30	Nil 5, 24	Low 1, 2, 29	Nil 5, 12, 27	Low 31	Nil 5, 6, 25	Medium 1, 28, 48	Low 5, 26	Nil 32
MPU/d	Nil -	Low 18	Nil 3, 22	Medium 21, 22	Nil -	Low 19	High 2, 3, 11, 17	Low 20	Nil -
ECR/a	Low 2, 13	Low 8	Nil -	Medium 11, 25	Medium 14, 18	Low 9	Low 2, 12	Medium 10	Nil 15
ECR/b	Medium 29, 30	Low 8, 21	Medium 28	Low 24	Medium 31	Low 22	Medium 2, 25, 26, 27	Low 23	Nil 32, 33
ECR/c	Medium 1, 8, 20	Low 14	Low 19	Low -	Medium 12, 22	Low 15	Low 18	Low 6	Low 22
ECR/d	Medium 22	Low 1, 16	Nil -	Medium 19	Low 21, 23	Medium 17	Medium 7, 20	High 1, 3, 12, 18	Nil 24
ECR/e	Medium 20	Low 15	Nil -	Low 18	Low 21	Nil 16	High 19	Medium 17	Low 22
EPR/a	Nil -	Nil -	High 17	Nil -	Low 18	Low 14	Medium 16, 22	Medium 15	Low 20
EPR/b	High 19	Nil 12	High 8, 18	Low 16	Low 21	Low 13	High 1, 2, 6, 17	Medium 14	Nil 22
EPR/c	Low 21	Nil 14	High 16, 20	Low 18	Low 22	Low 14, 16	High 12, 15, 19, 20, 24, 42	Medium 17	Nil 23
MCU/a	Nil -	Nil 11	Nil -	Low 3	High 9, 17	Low 3, 12, 13, 14	Medium 4, 5, 16	Medium 10, 15	Nil -
MCU/b	Low 19	High 1, 17	Low 18	Medium 1, 8, 20	Medium 12, 21	Medium 2, 20	High 1, 21	Medium 21	Nil -
MCU/c	Low 24	Nil -	Low 13, 22, 23	Low 20, 22	Medium 2, 25, 26	Low 18	Low 17, 21	Low 19	Low 27
MCU/d	Medium 31	Low 26, 35	Medium 30	Low 29	High 12, 33, 34	Low 27	High 1, 3, 24, 25, 37, 39, 45	Low 28, 34	Nil 36

MCU/e	Medium 30	Low 24	Low 29	Low 27	High 31	Nil 25	Medium 28	High 5, 19, 21, 26	Nil 32
JOPR/a	Low 20	Nil 21	Low 5, 25, 27	Low 1, 22	Low 17	Low 28	High 23, 24, 16	Low 24	Nil -
JOPR/b	Low 27	High 1, 28	Nil 33, 34	Low 26, 29, 36	Low -	Nil 36	Medium 1, 29, 30, 31, 35	Low 37	Medium 21, 39
JOPR/c	Low 10, 11	Nil 12	Nil 14	Low 2, 13	Low 16, 17	Low 18	Low 15	Low 1, 19	Medium 2, 21
JOPR/d	Nil -	Nil -	Low 1, 2, 17	Low 2, 9, 11, 15	Low 11, 18	High 11, 12, 13	Low 1, 11, 16	Medium 14	Medium 11, 19
JOPR/e	High 14	Nil 15	Low 2, 17	Medium 16	Low 18	Medium 20, 21, 22	Low 11, 12, 13, 19	Nil 23	Nil 24
JOPR/f	Low 18	Medium 1, 17	Medium 15, 22, 23	Low 19	High 24	Nil 25	Medium 1, 5, 6, 20	Medium 26	Medium 27
EPU/a	Nil -	Nil -	Nil -	Nil -	Nil -	Medium 1, 3, 5	Medium 2	Nil -	Ni. -
EPU/b	Nil -	Medium 18, 21, 22	Low 16, 26	Medium 19, 20, 23	Low 24	Medium 17, 19, 20	High 3, 15	Low 20	Low 25
EPU/c	Nil -	Nil -	Low 14, 21	Nil 17	Low 14, 20	High 16, 17, 21	High 6, 17, 18, 21, 22	Nil -	Nil -
EPU/d	Nil -	High 1, 12	Medium 10, 16	Nil 5	Nil 5, 17	High 1, 3, 4, 5, 13	Medium 1, 15	Nil -	Nil 18
EPU/e	Nil -	Nil -	Low 9, 11, 22	Nil -	Nil -	High 2, 3	High 17, 18, 19	Nil -	Nil 22
EPU/f	Nil -	Nil -	Low 6, 7, 8	Nil -	Nil -	Medium 1, 3, 4, 28	High 1, 4, 17	Nill -	Medium 16, 20

Dimension F

	Subject Att.	Speedy	Overload	Balk	Threat	Special Course	Trad. Testing	2nd Ed	P/C	Lack Res
MCR/a	Low 13	Medium 16, 18, 20, 21	Low 16, 20	Low 9, 13, 19	-	High 16	High 15	Low 2	Medium 3, 15	Low 4, 6
MCR/b	Nil 25	Medium 30	Nil 32	Nil 31	Low 31	Nil 28	Nil 27	-	Nil 29	-
MCR/c	Nil 20	Medium 25, 26	High 17, 28, 35	Nil 27	-	High 23	Low 13, 22	Nil 21	Low 24	-
MCR/d	Medium 25, 26	High 28	High 31	Nil 30	-	High 4, 21, 22	Nil 27	Nil 11, 12	Low 4, 29	Medium 21
MCR/e	Low 4, 23, 24	Low 27, 29	Medium 32	Low 31	Medium 27	High 19	Low 21, 26	-	Medium 28, 35	-
MCR/f	Nil 23	-	Medium 22, 32	Nil 31	-	Low 19, 20, 26, 27	Nil 22, 24	Low 18	Low 25, 32	Medium 26
MCR/g	Nil 9, 22, 40	Low 27, 29, 30	Medium 32, 33	High 7, 18, 23, 31, 37	-	Low 23	Nil 24	-	Nil 25, 26	Medium 33
MCR/h	Nil 1, 2, 10, 30, 31, 32	High 20, 21, 36	Low 39	Low 10, 38	-	Low 21, 22, 34	Low 33, 36	Medium 23	Low 35	High 20
ECU/a	-	-	High 11, 20	-	Medium 9, 18	Low 2, 3, 10, 11	-	-	Medium 9, 21	-
ECU/b	Nil 30	Medium 33	Low 33	-	-	High 18, 31	-	-	Nil 32	Medium 27
ECU/c	Medium 24	-	Medium 25, 26	Nil 8	-	Medium 9, 21, 25	-	-	-	-
ECU/d	Nil 7	Medium 23	High 7	-	-	High 1	Low 4	-	-	-
ECU/e	Low 12	Medium 10, 15	-	Medium 14	Medium -	-	-	Medium 10	Nil 13	-

ECU/f	Medium -	Medium 12, 27	Medium 12, 27	High 10	Medium 7, 10	Low 1	-	-	-	-
MPU/a	Medium 9, 11, 27, 34	Low 12, 32, 33	Low 35	Low 4, 10, 34	High 12	Medium 1, 9, 30	Nil 29	Medium 11, 28	Low 31	-
MPU/b	High 4, 5, 20, 21, 46	Medium 5, 50, 51	Medium 1, 50, 51	Medium 35, 52, 54, 55	Low 5	Low 6, 21, 22, 23, 24, 41, 48, 54	Low 47, 61	-	Low 22, 49	-
MPU/c	High 5, 12, 39, 40, 42	Low 44, 46	Low -	Nil 45	-	High 12, 14, 15, 20, 30, 42, 44	Medium 41	-	Medium 43	-
MPU/d	Medium 8, 22	-	-	Medium 2, 15, 22	-	Low 22	Medium 3	Medium 8	-	Medium 15
ECR/a	High 4, 19, 20	High 1, 24, 25	High 1	Nil 26	-	High 9, 21	Nil 22	High 1, 4, 6	Medium 6, 23	High 1
ECR/b	Low 1, 37	Low 41	-	Medium 10, 12	-	Medium 1, 38	Low 39	Low 39	Low 15, 39, 40	Medium 1
ECR/c	Low 24	-	Low 30	Low 11, 29	-	High 1, 25	Nil 26	-	Nil 28	-
ECR/d	Low 26	-	Nil 30	Nil 31	-	High 14, 27	Low 28	-	Low 29	-
ECR/e	Nil 6, 25	Mediam 29, 30	Low 32	Medium 24, 31	-	Nil 26	Low 27	High 12, 16	Medium 28	-
EPR/a	Low 4, 23	High 28, 29	Low 31	Medium 30	Medium 30	High 2, 24, 26	Medium 25	-	Nil 27	High 28
EPR/b	Low 27, 28	High 3, 19, 20, 33, 34	Medium 36, 37	Medium 3, 35	-	High 30	Nil 29	-	Low 31, 32	-
EPR/c	Nil 26, 34	High 27, 30, 32, 39	Medium 37	High 36	-	High 6, 29, 30, 38, 39, 40, 41	Medium 10, 28	-	Nil 31	High 33
MCU/a	Medium 21, 22	High 19	Nil 21	-	-	-	-	-	Nil 20	-
MCU/b	Low 26	-	Low 33, 34	Low 30, 31	-	High 26, 27	-	Nil 32	Nil 29	-
MCU/c	Low 24	-	Low 15, 29, 30	Low 32	-	Medium 16, 21	-	Nil 10	-	-
MCU/d	Low 40	Medium 44	Low 41	Medium 11	-	Nil 32	-	Nil 14, 15	Medium 44	-
MCU/e	Low 34	-	Low 40	Low 39	-	Low 35	Nil 5, 7, 36	Medium 37	Nil 38	Medium 21
JOPR/a	High 27	-	Medium 27	-	-	-	-	Low 28	-	-
JOPR/b	High 31, 42	High 31, 47	Medium 2	High 33, 34, 43, 48	-	High 43, 45	Medium 44	Low 16	Nil 46	-
JOPR/c	Medium 23	-	Nil 28	High 27	-	Low 17, 24	-	-	Nil 25	-
JOPR/d	-	Nil -	-	-	-	-	-	-	-	-
JOPR/e	-	High 21, 22	-	Low 25	-	-	-	-	-	-
JOPR/f	-	-	Medium 28, 29	-	-	-	Low 27	Medium 13, 14, 20, 21	-	High 28, 29, 30
EPU/a	-	-	-	-	-	-	-	-	-	-
EPU/b	-	-	-	High 26	-	High 14, 27, 28	Medium 19	-	-	High 19, 28
EPU/c	-	Low 19	-	High 27	-	High 24	-	-	Nil 25	Medium 18, 19
EPU/d	-	-	Low 37	-	-	High 2	-	-	-	High 2, 21
EPU/e	-	-	Medium 22	High 9	-	-	-	-	-	High 23
EPU/f	-	Low -	-	-	-	-	-	-	-	-

Dimension G

	P.D.	Add Res.	Parent	Community	Board	Principal	Role	Teacher	Adapt	Open	Student
MCR/a	Low 21, 22	Low 4	Low 17	-	Low 21, 21	-	Medium 4, 23	High 13, 22	Medium 14	-	-
MCR/b	Nil 35	-	-	Medium 6, 7	Nil 24, 36	Medium 23	Medium 37	-	-	-	Medium 25, 32, 34
MCR/c	Medium 29	-	Low 32	-	Low 19, 33	Medium 18, 29	High 35	Nil 36	High 30	Nil 36	Low 37
MCR/d	Medium 21, 31, 32	-	-	-	Low 33	Low 33	High 32, 34	High 32	Low 2	-	-
MCR/e	Medium 33, 34	Low 38	Low 9, 28, 35	Low 17	Nil -	Medium 19, 36	High 11, 20, 33, 37	High 9, 11, 20, 36	Low 10	-	Low 13
MCR/f	Medium 28, 29	Medium 28, 30	-	-	-	Low 31	-	Medium 9, 10, 28	Low 11, 12, 13	-	Medium 22
MCR/g	Medium 23, 34, 37	-	Medium 38, 41	Medium 39, 40	-	Medium 35, 37	-	High 23, 37	Medium 21, 26	Nil 1	Medium 28
MCR/h	Low 40, 41	High 43	Medium 43	-	-	-	High 44	Medium 10, 43	Low 42	-	Low 16
ECU/a	Medium 23	High 22	-	-	-	Low 6, 12, 18	-	High 1, 4, 15	Medium 22	-	-
ECU/b	Medium 34	Medium 27, 38	Low 36	-	Low 27, 37	Low 28, 35	Medium 39	Low 9, 29	Low 16	-	-
ECU/c	-	-	-	-	-	-	-	Medium 8, 27	High 9	-	Low 21
ECU/d	Medium 22	Medium 22	Medium 23	-	-	-	-	-	Low 3	-	Low 19
ECU/e	-	-	-	-	-	-	-	-	-	-	-
ECU/f	-	-	-	-	-	Low 27	-	High 10	Nil 2, 3	-	-
MPU/a	High 1, 27, 36, 47	Low 11	Medium 36	Nil 36	Medium 36	Low 1	High 12, 37	Medium 4, 37	-	-	-
MPU/b	Nil 48, 58	Low 45	Medium 60	-	-	High 3, 26, 45, 59	Nil 60	Low 52	High 1, 56, 57	High 1, 3, 41, 54	Low 14, 17, 31, 61
MPU/c	High 36, 47	Low 49	-	-	High 35	Low 36, 49	Nil 50	Nil 37	Medium 51, 52, 53	-	Low 23
MPU/d	High 13	-	Low 32	-	Medium 3	-	-	Low 33	High 1, 33, 34	-	-
ECR/a	-	High 16, 18, 29	-	-	Low 18	-	High 18, 28	High 18	-	-	-
ECR/b	-	Low 44	Low 44	-	-	-	Low 43	Medium 10, 11, 26	Low 20	-	Low 38
ECR/c	High 26, 31	High 32	-	-	High 7, 32	Medium 26, 27	-	Medium 31	-	-	-
ECR/d	Low 33	Low 33, 34, 35	-	-	Nil 32	-	-	-	Medium 10, 11, 12, 34, 35	-	-
ECR/e	High 33	High 5, 6	-	High 34	Low 34	Low 34	High 35	-	-	-	-
EPR/a	High 29, 32	-	-	-	High 32	High 1, 32	-	-	Medium 29, 33, 34	Medium 32	Medium 32
EPR/b	Medium 38, 47	-	-	-	High 39, 43	Low 26, 41	-	Medium 44	High 40	Low 45	Low 46
EPR/c	Medium 43	High 43, 44	-	-	-	Low 24	-	-	Low 45	-	-

MCU/a	-	Nil 17	Nil 23	Nil 23	-	-	-	-	Medium 19, 20	Low 23	-
MCU/b	High 35, 37	-	-	-	-	Low 28	Low 36, 37	-	-	-	-
MCU/c	High 32	High 31	-	-	Low 30	-	-	-	-	-	-
MCU/d	Medium 47	Low 48	-	-	-	-	-	High 46	-	-	-
MCU/e	High 41	-	Medium 9	-	Low 41	Low 41	High 42	-	-	Nil 43	Low 43
JOPR/a	-	Medium 18	-	-	-	-	-	High 5, 18, 19	-	-	-
JOPR/b	-	-	-	-	-	-	-	High 30, 48, 50	-	-	Low 42
JOPR/c	-	Low 29	-	-	-	-	Low 27	-	High 26	-	-
JOPR/d	-	-	-	-	-	-	-	High 20	-	-	-
JOPR/e	-	High 25	-	-	-	-	-	High 25	-	-	-
JOPR/f	-	High 8, 14, 29, 30	Low 6	-	Low 14	-	-	-	Low 23	-	-
EPU/a	-	-	Nil 10	-	Nil 10	Nil 4	-	-	-	-	-
EPU/b	-	High 28	-	-	-	-	-	-	-	-	-
EPU/c	High 26	High 27, 28, 29	-	-	-	-	High 30	-	High 23	-	-
EPU/d	High 21	High 20	-	-	-	-	Mediu m 19	Medium 21	High 20	-	-
EPU/e	-	High 23	-	-	-	-	-	High 23	-	-	-
EPU/f	-	-	-	High 42, 43	-	High 30	-	High 1	High 25, 26, 33, 41	-	Low 34