



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service

Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-56466-0

A THEORETICAL MODEL OF CURRICULUM PLANNING

Thesis

Presented to

The School of Graduate Studies, University of Ottawa

in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

by

Melvin M. Regular

© Melvin M. Regular, Ottawa, Canada, 1989.



UNIVERSITÉ D'OTTAWA
UNIVERSITY OF OTTAWA

This thesis is dedicated to my wife, Karen, and my son, Kenneth. Their unwavering support throughout the doctoral program and the writing of this thesis is gratefully acknowledged and deeply appreciated.

ACKNOWLEDGEMENTS

This thesis was prepared under the supervision of Professor Ian Dow, Ph.D., of the Faculty of Education, University of Ottawa. His direction and support are gratefully acknowledged.

Professor Ruth Whitehead, Ph.D., of the Faculty of Education, University of Ottawa, assisted Professor Dow, working closely with the author throughout the project. Her patient encouragement and advice has helped immensely in successfully completing the thesis.

Appreciation is also extended to Professor Ruth Wright, Ph.D., of the Faculty of Education, St. Francis Xavier University, Antigonish, Nova Scotia, and to Susan Rendell, Curriculum Editor, Department of Education, Government of Newfoundland and Labrador, St. John's, for their valuable criticism and counsel; and to Linda Waterton, Trius Word Processing Services, St. John's, for cheerfully and efficiently typing the thesis.

TABLE OF CONTENTS

	Page
List of Tables and Figures.....	ix
Abstract.....	xii
Introduction.....	1
CHAPTER	
I THEORETICAL RATIONALE	5
Introduction.....	5
Statement of the Problem.....	5
The Purpose of the Study.....	6
Planning Theory.....	7
The Nature of the Planning Process.....	8
Summary.....	13
Educational Planning.....	15
The Nature of the Educational	
Planning Process.....	16
Summary.....	22
Curriculum Planning.....	23
An Historical Overview.....	23

	The Nature of the Curriculum	
	Planning Process.....	26
	Summary.....	50
	The Role of Models.....	53
	The Problem of the Study.....	55
	The Purpose of the Study.....	57
	Summary.....	60
II	METHODOLOGY	62
	Introduction.....	62
	Theoretical Model Building.....	63
	Phase One: Exploration.....	66
	Phase Two: Description.....	84
	Phase Three: Classification.....	85
	Phase Four: Explanation.....	88
	Summary.....	90
III	EXPLORATION	91
	Introduction.....	91
	Tyler, 1949.....	93
	Taba, 1962.....	99
	Bloom, 1981.....	107
	Goodlad, 1979.....	117
	Eisner, 1985.....	125
	Smith, Stanley, and Shores, 1957.....	141

	Saylor, Alexander, and Lewis, 1981.....	155
	Bobbitt, 1924.....	169
	Doll, 1982.....	174
	Macdonald and Purpel, 1987.....	188
	Schwab, 1970, 1971, 1973, 1983.....	197
	Tanner and Tanner, 1980.....	215
	Summary.....	226
IV	DESCRIPTION AND CLASSIFICATION	227
	Introduction.....	227
	Description of Data Relative to	
	Research Questions.....	228
	Purpose of Planning.....	228
	Elements of Planning.....	231
	Curriculum Planners.....	235
	Contextual Influences.....	239
	Mode of Planning.....	246
	Summary.....	258
	Classification of Data Relative to	
	Research Questions.....	259
	Purpose of Planning.....	259
	Elements of Planning.....	264
	Curriculum Planners.....	269
	Contextual Influences.....	277

	Mode of Curriculum Planning.....	292
	Phases.....	292
	Summary.....	319
V	EXPLANATION AND MODEL	324
	Introduction.....	324
	Phases.....	325
	Metapanning Phase.....	327
	Study Phase.....	328
	Creating Phase.....	331
	Functional Components.....	334
	Purposes.....	334
	Processes.....	335
	Elements.....	338
	Planners.....	338
	Leadership.....	342
	Contextual Influences.....	342
	Society, Learners, Knowledge, and	
	Role of the School.....	347
	Educational Philosophy.....	348
	History of Curriculum Theory and	
	Practice.....	350
	Other Process Variables.....	351

	The Complete Theoretical Model.....	355
	Summary.....	365
VI	SUMMARY AND CONCLUSIONS	366
	Introduction.....	366
	Review of the Study.....	366
	Contributions of the Study.....	371
	Implications for Educational Research.....	373
	Implications for Practice.....	376
	References.....	380
	Appendix A - Curriculum Textbooks Published	
	Between January, 1980 and June, 1986..	399
	Appendix B - Rank Order of Researchers by Number	
	of Citations in Current Curriculum	
	Textbooks.....	403

LIST OF TABLES AND FIGURES

	Page
 Tables	
1 Major Data Sources.....	82
2 Summary of Information Relative to Research Questions from Tyler (1949).....	97
3 Summary of Information Relative to Research Questions from Taba (1962).....	102
4 Summary of Information Relative to Research Questions from Bloom (1981).....	112
5 Summary of Information Relative to Research Questions from Goodlad (1979).....	119
6 Summary of Information Relative to Research Questions from Eisner (1985).....	134
7 Summary of Information Relative to Research Questions from Smith, Stanley and Shores (1957).....	147
8 Summary of Information Relative to Research Questions from Saylor, Alexander and Lewis (1981).....	161
9 Summary of Information Relative to Research Questions from Bobbitt (1924).....	166

10	Summary of Information Relative to Research	
	Questions from Doll (1986).....	181
11	Summary of Information Relative to Research	
	Questions from Macdonald and Purpel	
	(1987).....	194
12	Summary of Information Relative to Research	
	Questions from Schwab (1970, 1971,	
	1973, 1983).....	212
13	Summary of Information Relative to Research	
	Questions from Tanner and Tanner (1980)...	223
14	Purposes of Curriculum Planning from an	
	Analysis of Major Data Sources.....	230
15	Elements of Curriculum Planning from an	
	Analysis of Major Data Sources.....	233
16	Participants in Curriculum Planning from an	
	Analysis of Major Data Sources.....	237
17	Contextual Influences on Curriculum Planning	
	From an Analysis of Major Data.....	242
18	Statements of How Curriculum Planning Occurs	
	From an Analysis of Major Data Sources....	247
19	Classification of the Purposes of	
	Curriculum Planning.....	263
20	Classification of the Elements of	

	Curriculum Planning.....	270
21	Classification of Curriculum Planners.....	276
22	Classification of Contextual Influences on Curriculum Planning.....	289
23	Classification of Statements on Curriculum Planning Mode.....	307
24	A Summary of the Major Categories (Components) of Curriculum Planning Identified in the Classification Phase....	321

Figures

1	The Phases and Elements of the Curriculum Planning Process.....	326
2	The Phases and Functional Components of the Curriculum Planning Process.....	336
3	A Theoretical Model of Curriculum Planning.....	346

ABSTRACT

A Theoretical Model of Curriculum Planning

Although curriculum planning has received considerable attention in educational inquiry, it is not understood from an interpretative-theoretical perspective. A review of the literature shows that there is no universally accepted theory of the phenomenon. Instead, there are diverse assumptions and views and many different models of the curriculum planning process.

Existing models are generally considered idiosyncratic and prescriptive; they are neither descriptive of practice nor integrative of existing knowledge. Because curriculum planning is so complex, comprehensive investigation and explanation are required. The demand for improved educational practice necessitates a carefully developed understanding of the curriculum planning process. The purpose of this study, therefore, is to develop a model of curriculum planning that incorporates the perspectives and findings of various curriculum researchers.

In the study, a theoretical model of curriculum planning is developed from the theories, research, and

models of the 12 most frequently studied curriculum scholars. The interpretative-theoretical methodology employed is rigorous, consisting of four distinct sequential phases.

The first phase, exploration, involves investigation of the phenomenon through a framework of basic research questions applied to each of the study's major data sources. Phase two, description, involves analysis of the information reported in phase one, using an explicit, systematic procedure of juxtaposing data and comparing data sources. The third phase, classification, consists of the development of categories of data that incorporate the major similarities and distinctions in or about the phenomenon.

In the fourth phase, explanation, the categories of data and their relationships are conceptualized and explained. The conceptualization is represented in a diagram, a theoretical model of curriculum planning. The model provides answers to five research questions:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence curriculum planning?

5. How does curriculum planning occur?

Four categories of purposes, or ultimate educational benefits desired, emerge from the study. They include purposes for the learners, the society, the school and the program, and the participants in the planning process (the curriculum planners).

Nine categories of elements are identified: philosophy and aims, intentions (i.e., goals and objectives), selection and organization of content, selection and organization of learning opportunities, evaluation, anticipation of instruction, deliberation, data-gathering and analysis, and formative evaluation. The first six are classified as content elements; the last three are process elements.

Five categories of curriculum planners emerge from the study: clients, users, legal authorities, meta-planning system staff, and external experts and influential authorities. The six categories of contextual influences that emerge are as follows: history and philosophy; the nature of the society and local community; the needs, abilities, and aspirations of the learners; understandings and beliefs about knowledge; the role of the school; the nature of the planning process.

Curriculum planning is found to occur in five sequential phases: metapanning, study, creating, implementing, evaluating. The major focus of this study is the first three phases -- metapanning, study, and creating -- which compose the curriculum formulation or modification stage.

The functional components of the planning process identified from the study are the purposes, elements, decision processes, planners, and leadership.

The study concludes that curriculum planning evolves through several phases under the guidance of metapanning. It demonstrates the influence of history and philosophy and the interdependence of the curriculum planning process and its social-political context. The study emphasizes the social nature of curriculum planning and the key role of group deliberation as a decision process. It also illustrates the need for an eclectic use of other decision processes, and confirms the crucial function of leadership in collaborative planning.

The study represents a synthesis of knowledge on curriculum planning.

INTRODUCTION

Curriculum planning is the general focus of this study. The specific focus of the study is on the development of a theoretical model of the curriculum planning process.

A review of the literature reveals a variety of theoretical assumptions and several paradigms or models of curriculum planning. However, no comprehensive theory of curriculum and its development exists. The need for a better theoretical understanding of curriculum planning and for more effective, efficient curriculum practice justifies theoretical model building.

Planning is a common human activity. It is treated in the literature of planning theory both as a general phenomenon and a specialized one. Most theorists agree that planning is essentially a process of thought resulting in action (Chadwick, 1978, p. 24).

Educational planning is a specialized planning domain, with a history extending back to ancient times. Coombs (1970) cites the following examples of educational planning: Plato's program for the leadership needs of ancient Athens; John Knox's proposal for national education in sixteenth-century Scotland; a variety of educ-

ational documents of the eighteenth and nineteenth centuries bearing such titles as An Educational Plan and The Reform of Teaching (p. 17). In this century, curriculum planning has evolved into a distinct professional subfield of educational planning (Banghart & Trull, Jr., 1973; Beauchamp, 1981; Inbar, 1980).

One of the most influential curriculum thinkers is Ralph Tyler, who provides a powerful conception of what curriculum planning entails in his book Basic Principles of Curriculum and Instruction (1949). Other scholars and practitioners have also contributed greatly to the current understanding of curricular phenomena, resulting in an extensive curriculum heritage. Schubert (1980) documents over 1100 books published on the subject since 1900. When journal articles, research reports, and dissertations are taken into account, it is clear that curriculum has been an active field of inquiry throughout this century. Nevertheless, diversity rather than consensus is characteristic of the field (Macdonald & Purpel, 1987; Pinar, 1978a,b; Pratt, 1987; Schiro, 1978), and controversy continues: the why, what, who, and how of the curriculum process are still being disputed.

Other factors that affect curriculum theory and practice include the immense complexity of curricular

phenomena (Eisner, 1985; Gay, 1980; Schwab, 1970), the importance of curriculum planning to educational improvement (Smith, Stanley, & Shores, 1957), and the continuous nature of curriculum planning. Because of its complex character, a theoretical model of the curriculum process that can be used to interpret and explain the elements of planning and their relationships and that can serve as a guide to practice is necessary.

Various models of curriculum planning already exist in the literature. Most of them are idiosyncratic and prescriptive; some are descriptive, but they have been developed from a narrow data base. There is a need for curriculum models that attempt to integrate various theories and research findings. Support for such model building exists in the literature (Conant, 1951; Pinar, 1978; Pratt, 1987; Toulmin, 1953; Zais, 1976).

The purpose of this study is to develop such a comprehensive theoretical model of the curriculum planning process. This model will be developed through an examination of current studies and theories and the subjection of the results of the examination to an interpretative - theoretical methodology. The model will serve as an aid to understanding the process of curriculum planning and as a guide to practice.

The study is reported in six chapters. A theoretical rationale is presented in chapter one. The second chapter contains a general description of the four-phased methodology that was used in building the model. The results of the first phase of the methodology, exploration, are presented in chapter three. The results of the second and third phases, description and classification, are presented in chapter four. The results of the final phase, explanation, are presented in the fifth chapter and depicted in a theoretical model. The final chapter reviews the study and its contributions to curriculum planning. Implications of the model for research and practice are also contained in chapter six.

CHAPTER I: THEORETICAL RATIONALE

Introduction

This chapter contains a brief description of the problem and purpose of the study followed by a supporting theoretical rationale. In developing the theoretical rationale, planning literature is reviewed to show the relation between general planning theory and educational planning and to establish curriculum planning as a specialized subfield of educational planning. Curriculum literature is also examined for the purpose of establishing the need for further study of curriculum planning and to justify the development of a theoretical model of the process. The chapter concludes with a more detailed explanation of the problem and purpose of the study.

Statement of the Problem

Although curriculum planning has received considerable attention since early in this century, it is not understood from an interpretive - theoretical perspective. A review of the literature reveals a variety of assumptions, definitions, and models. It also shows that

existing models of curriculum planning are generally idiosyncratic and prescriptive, confirming the need for integration and synthesis of various theories and research findings in the interests of a better understanding of the process and improved educational practice.

The Purpose of the Study

Various types of models are discussed in the literature and there is a general recognition of their usefulness in facilitating exploration, explanation, and theory development. The power of theoretical models to assist in understanding complex phenomena - and curriculum planning is nothing if not complex - is also supported in the literature.

The purpose of this study, therefore, is to develop a comprehensive theoretical model of curriculum planning that incorporates various theories and findings in an attempt to contribute to existing knowledge of the curriculum planning process and to improved educational practice.

Planning Theory

Among many comments made on the modern era is an observation by Gruchy (1981) that "we now live in a Plan Age ... in an age when, since the future is largely unpredictable, reliance on planning in some form is widely accepted as a way of coping with an uncertain future" (p. 371). Corporate enterprises employ systems analysis for maximum returns on investments and governments make long-term plans for providing health care, education, and other services (Gruchy, 1981, p. 371). The universe of planning and plans as charted by Steiner (1969) encompasses the plans of individuals, businesses, governments at all levels, and national and international organizations (p. 10).

Planning is treated in the literature as a general phenomenon, as different fields or disciplines of inquiry, and as a crucial administrative function. In the review that follows, planning is examined from all three perspectives in an effort to determine its generic meaning and establish that education is a specialized planning field and that curriculum is a subfield of educational planning.

The Nature of the Planning Process

Planning as a General Phenomenon

Planning as a general phenomenon is discussed by Dror (1971), Faludi (1973), Weber (1978), Chadwick (1978), and Sloma (1984). Dror (1971) describes planning as essentially "a methodology of rational thought and action" (p. 99). Faludi (1973) also emphasizes the role of reason and deliberate choice in planning (p. 206). Weber (1978) says that planning is basically a cognitive style, not a substantive field, a specialized departmental function, or technical expertise. It is a special way of thinking about human wants and how to satisfy them (p. 158). Chadwick (1978) also views planning as a rational process. Planning, he says, is "a process of thought and action based upon that thought - in point of fact, forethought, thought for the future - nothing more or less than this is planning" (p. 24). He notes that planning is common to all human beings and all scientific investigation. It is a general method that is independent of the field within which it is practised (p. 24). Sloma (1984) describes planning as, first and foremost, "an attitude, a frame of mind" (p. 3).

Dror (1971) defines planning as "the process of

preparing a set of decisions for action in the future, directed at achieving goals by preferable means" (p. 106). His analysis highlights the complexity of the process: planning involves a set of sequential decisions. He also stresses its purposefulness, its future (or anticipatory) orientation, and the fact that it is continuous - planning never stops. Dror also underscores the means-ends relation in planning and states that preferences and values are inevitably involved in the process (pp. 107-108).

Falui (1973), in discussing the role of reason and deliberate choice in planning, stresses the potential effects of planning on human growth and the development of self-direction in a democracy (p. 206). Defining planning as "the process by which a human being perpetually shapes his/her world and guides personal development" (pp. 41-42), he advocates widespread participation and open communication. He condemns rigid procedures and the imposition of views by any individual or group as being antidemocratic and inhibiting of human growth and self-direction (p. 206).

Sloma (1984) draws attention to the peculiar nature of planning. In a sense, plans are always "wrong" because the future never unfolds precisely as planned.

At the same time, plans are always "right" because ostensibly they reflect the best current thinking.

Social Planning

Kahn (1969) discusses the field of social planning. In so doing he articulates a broad conception of the planning process. Kahn stresses the role of values and beliefs. He describes planning as a rational activity that involves constant shuttling between the comprehensive and the limited, and between systematic, logical, empirical activity and decision-making which is, in the broadest sense, political. Planning strategies, he says, stretch along a continuum from the segmented to the comprehensive, at all levels of decision-making (p. viii).

Kahn asserts that there can be no rationality without decisions about the merit or value of the ends, means, procedures, and even the side-effects of the planning process (p. 97). In his opinion, this choosing of values necessitates the widespread participation in the process by the people affected. He believes that popular control is the wisest approach to valuation. Popular control, he argues, contributes to democratic renewal and it is socio-therapeutic for the alienated and

for those who lack communal coping skills (pp. 130-131).

Friedman (1973) defines social planning as "the guidance of change within a social system" (p. 346) and, like Kahn, he is careful not to limit planning to decision making prior to action. Rather, he emphasizes the continuous nature of planning. Society is an ongoing concern and the stream of life does not wait for planners to give it direction. He sees planning as "reason acting on the network of ongoing activities through the intervention of certain decision structures and processes" (p. 347).

Business and Economic Planning

Conceptions of planning from the perspective of business include planning as conscious decision making affecting the future (Koontz & O'Donnell, 1955); as a systematic and continuous process of selecting objectives, strategies, and policies (Steiner, 1969) and as a process of designing the future and choosing methods to bring it about (Ackoff, 1970). In contrast with Friedman, Ackoff seems to take the position that planning is decision making done in advance of taking action (pp. 1-4).

Troub (1981) defines economic planning as a "set of

negotiations to determine prospective activities in pursuit of future circumstances currently preferred by actors with capacities to influence the outcomes" (p. 383). He states that human motives are key in the planning process because people act in and through organizations to achieve organizational purposes that are consistent with their own interests (p. 383).

Planning as an Administrative Function

Beer (1979) discusses planning as a function of organizational administration; his is a cybernetic conception of the management process. He considers planning to be a critical managerial function that is future oriented and continuous. Beer describes planning as "organizational glue" that provides organizational cohesiveness. He argues that plans must be continually aborted, and that it is through the continual planning and aborting of plans that the manager successfully applies this cohesive glue (p. 338).

Steers, Ungson, and Mowday (1985) share Beer's view of planning as a critical managerial function. In their view, the recognition that some intervention is needed to bring about change is what prompts management planning. They identify five major characteristics of the planning

process: it is continuous and systematic; it is anticipatory, or future oriented; it is composed of a set of interdependent decisions; it requires the widespread involvement of individuals and groups; it results in the realization of future states that would not exist if no plans were made (pp. 96-98).

Summary

The literature on general planning theory, planning theory in the applied fields of social planning, business and economic planning, and planning as an organizational management function has been reviewed. According to the literature, planning is conceived of in the following ways: as a methodology of rational thought and action; as choosing; as a cognitive style; as forethought; as an attitude or frame of mind; as a process of shaping one's world and guiding personal development; as the guidance of change within a social system; as reason acting on a network of ongoing activities; as conscious decision-making about the future; as a systematic process of selecting objectives and strategies, establishing an organization to achieve objectives, and evaluating

performance; as a process of designing the future; as a set of negotiations; as organizational glue; and as a crucial function of management.

There is no consensus in the literature on a single definition of planning. However, there appears to be considerable support for the conclusion that planning is fundamentally a process of rational thought and action characterized by purposefulness - planning is directed at goals and the best means of accomplishing them; complexity - planning involves a set of interdependent decisions; future orientation - planning is anticipatory, resulting in future states that would not exist if no planning had occurred; continuousness - planning is ongoing; and valuation - planning requires decisions about merit and worth.

In the following section, the relation between planning and educational planning is explored. An indepth examination of educational planning is made for the purpose of establishing that curriculum is a subfield of educational inquiry and planning.

Educational Planning

In his analysis of planning as a methodology of rational thought and action, Dror (1971) identifies subject matter as planning's primary element (pp. 323-343). Banghart and Trull, Jr. (1973), in their treatment of educational planning, stress the importance of education as a field of planning in modern society. The review of the literature that follows confirms that educational planning is considered to be an applied field of planning that exhibits the same characteristics described earlier as generic to planning in general.

There are two major perspectives of educational planning in the current literature. One views educational planning as a distinct field or discipline (e.g., Coombs, 1970); the other views it as a key function of educational administration (e.g., Knezevich, 1984). As a discipline of inquiry, educational planning has received increased attention throughout the world since the early 1950s (Coombs, 1970; Inbar, 1980). The evolution of the field of educational administration has paralleled the evolution of the broader field of administrative science pioneered around the turn of the century by such thinkers as Henri Fayol and Fredrick Taylor (Hoy & Miskal, 1978,

pp. 13-17).

This review of the literature explores educational planning as a field of inquiry and as an administrative function, focusing on the nature of the process and its subject matter. The purpose is to establish a relation between general planning theory and educational planning, and to show that curriculum planning is an important subfield of educational planning.

The Nature of the Educational Planning Process

Educational Planning as a Field of Inquiry

Educational planning is broadly described by Coombs (1970) as "the application of rational, systematic analysis to the process of educational development with the aim of making education more effective and efficient in responding to the needs and goals of its students and society" (p. 14). According to Coombs, the specific characteristics of educational planning are as follows: ideological neutrality - the concepts and principles of educational planning are universally applicable; future orientation - educational planning deals with the future, drawing on experience to do so; continuousness - as plans

for one period move into action, planning for the next must get underway; relation to management - planning per se is not the maker of policies and management decisions, but a handmaiden to those who do make them (p. 15).

Banghart and Trull, Jr. (1973) characterize educational planning as a rational process concerned with social goals, means and ends, processes, and control. It is a dynamic process, involving feedback and modification, and it is deliberate and continuous (pp. 7-8).

Inbar (1980) defines educational planning as "the process of preparing a set of decisions for future action pertaining to education" (p. 379). This definition parallels the definition of Dror (1971) of planning as a general phenomenon. Inbar argues that education is a discipline that cannot be tightly linked to other disciplines. Economists, political scientists, urban planners, statisticians, and administrators can and should contribute to educational planning, but educational planning has first of all to be a reflection of educational activity and the unique characteristics of educational behavior (p. 388).

Educational Planning as an Administrative Function

Sergiovanni (1980), Morphet, Johns, and Reller

(1982), Kimbrough (1983), and Knezevich (1984) consider educational planning to be a key function of the educational administrator. According to Sergiovanni, educational planning is a systematic, deliberate, and continuous process that precedes decision-making (p. 284); Morphet et al. view it as a systematic process that normally requires the participation of various people having specialized, technical expertise; it usually follows a series of logical steps and procedures related to purpose, organization and personnel, priorities, alternatives, implementation, evaluation, and revision (pp. 134-152). Kimbrough (1983) calls educational planning "a consideration of the future" (p. 353). Knezevich defines educational planning as follows:

A set of formal and rational activities that seek to anticipate conditions, directions, and challenges of some future point in time for the purpose of enhancing readiness of personnel and the organization to perform more effectively and to attain relevant objectives by optimal means. (1984, p. 87)

Sergiovanni (1980) urges proactive administrative

leadership - planning what to do, how to do it, and when to do it; organizing the means to achieve the ends; and giving leadership to those who perform activities in pursuit of the goals (p. 287). Morphet et al. (1982) highlight the importance of the planning function in educational administration, citing the myriad of perplexing problems confronting administrators (p. 175). Kimbrough (1983) discusses three types of administrative planning: preventative, adaptive, and inventive. Planning strategies available to the educational administrator are rational planning, mixed scanning, incremental planning, and linkage (pp. 354-360). Knezevich (1984) claims to have difficulty in distinguishing between planning and administration. He observes that planning is a process used by the educational administrator when s/he performs as leader, decision maker, and change agent (p. 87).

To summarize, conceptions of the nature of the educational planning process differ from theorist to theorist. Certain characteristics, however, appear to be common to most conceptions. Rationality, purposefulness, future orientation, and continuousness are specifically cited in the literature, and others, such as valuation and complexity, are implied.

The Subject Matter of Educational Planning

Banghart and Trull, Jr. (1973) identify the following as the proper subject matter of educational planning: goals and objectives, programs and services, human resources, finance, government structures, and the planning context (pp. 83-84). They conceive of the educational system as comprising four subsystems: educational activity, communication, facilitation, and operations (p. 122). Educational activity (learning process) is the foundation of educational planning. It includes all services performed directly for students. It also includes activities that are auxiliary to the learning process, such as resource planning, instructional strategies and programing, teacher inservice education, and evaluation (p. 123). In the opinion of Banghart and Trull, curriculum planning is the most basic form of educational planning, and perhaps the oldest (p. 124).

Inbar (1980) describes a conceptual framework that classifies thirty-six areas of educational planning, curriculum among them (p. 383). He distinguishes between two types of curriculum planning: that which deals with explicit knowledge and behaviorally defined objectives; that which treats knowledge that is subjective and tacit,

pertaining to human sensitivities and insights (pp. 384-385).

In Kimbrough's (1983) opinion, the crucial educational planning tasks are as follows: the establishment and maintenance of organizational structure, the administration of curriculum and instruction, the financing of education, the provision of business management and support services and services to personnel, the provision and maintenance of buildings and facilities, the promotion of school-community relations, and the carrying out of research and evaluation.

Knezevich (1984) identifies the plans that may be generated within an organization: strategic plans that focus on the system as a whole; structuring plans which stipulate authority, responsibilities, and relations; educational programs and service plans; standard operating rules and procedures; conflict and crisis-management plans; special purpose plans (p. 92).

The subject matter of educational planning also varies from theorist to theorist, but curriculum usually figures prominently in any list of educational planning concerns or tasks. Some theorists identify curriculum as the most important of all educational planning subject matter (e.g., Banghart & Trull, Jr., 1973).

Summary

Educational planning is treated in the literature both as a discipline of inquiry in its own right (Coombs, 1970; Inbar, 1980) and as a key function of educational administration (Kimbrough, 1983). Both perspectives, explicitly or implicitly identify rationality, purpose (goal orientation), future orientation, continuousness, valuation, and complexity as distinguishing characteristics of the educational planning process. These same planning features are recognized by general planning theorists and by theorists in applied planning fields; for example, social planning and business and economic planning.

The review of the literature on educational planning also establishes curriculum as an important subfield of educational planning (Banghart & Trull, Jr., 1973; Inbar, 1980; Kimbrough, 1983; Knezevich, 1984). A review of the literature on curriculum planning follows.

Curriculum Planning

The review of the literature so far has shown that all planning is conceived of as rational, purposeful, future oriented, continuous, complex, and value laden. In this section, the nature of curriculum planning as depicted in the literature is explored, and the problem of this study - the lack of understanding of the curriculum planning process from an interpretative-theoretical perspective - is considered.

The following section of the study contains a brief survey of the history of curriculum planning, an exploration of the nature of the process, and an examination of the potential of models - particularly theoretical models - to illuminate and guide curriculum inquiry and practice. This theoretical rationale is concluded with a detailed description of the problem and purpose of the study.

An Historical Overview

Throughout history, philosophers, social theorists, political and religious leaders, and parents and teachers

have been concerned with how to best help the young grow and mature. What knowledge is most worthwhile? Why? How it should be taught? (Schubert, 1986, pp. 54-70).

A review of pretwentieth-century curriculum history reveals philosophical perspectives and practices similar to those of today (Schubert, 1986; Tanner & Tanner, 1984). Some examples are as follows: the national educational system of ancient Egypt; the dual orientations in ancient China - education for personal contemplation and for preserving society and its institutions; education for pleasure or for a life of self-denial (classical Greece and Rome); Plato's vision of harmonious life in a just society (Schubert, 1986, pp. 52-96).

Since ancient times, education has been viewed in various ways: for propagating Christianity (Augustine, 354-430); for changing the Church (Luther, 1483-1546); for fostering scientific inquiry (Bacon, 1561-1626); for the universal acquisition of the "three Rs" (Petty, 1623-1687); for development of the virtuous citizen (Locke, 1632-1704); for meeting individual needs and interests (Rousseau, 1712-1778); for increased sophistication in reasoning (Hegel, 1770-1831).

The emergence of curriculum as a distinct field of educational inquiry is essentially a twentieth-century

development (Schubert, 1986, p. 70). It was not until 1918 in the United States of America that the first textbook addressing major curriculum questions was written - a book entitled The Curriculum, by Franklin Bobbitt. In other countries, formal curriculum study emerged even later. For example, in the United Kingdom it began less than 30 years ago (Taylor & Richards, 1985, p. 13).

The birth of curriculum planning in North America in this century is properly situated in the 1890s, a period described by Kliebard as "a crucible of curriculum change" (1982). During that period, the revolutionary scientific theories of evolution, relativity, and quantum theory were first propounded. Psychology gained credibility. Universal education was advocated, accompanied by rising interest in methods of delivery. The association learning theory was challenged by the concept of learning by doing and habit acquisition, and child study and the linking of education and democracy were championed. As a result, argues Schubert, the specialized field of curriculum studies emerged, as did many of the current theories and problems (1986, pp. 70-92).

The Nature of the Curriculum Planning Process

Curriculum planning can be discussed by examining each of the characteristics of planning already identified. For the purpose of this study, however, it is sufficient to discuss the process in terms of inevitability, significance, and complexity. These three characteristics are dealt with extensively in the literature. They have been selected for examination here because of their power to further illuminate the nature of curriculum planning and to describe the problem of this study: the need for a comprehensive theoretical explanation of the curriculum planning process.

The inevitability of curriculum planning, as discussed in curriculum literature, pertains to its continuousness, a characteristic it shares with all planning. Significance refers to considerations of purpose and value. Curriculum planning is complex because it requires a plurality of interdependent decisions and the consideration of philosophical issues of purpose and merit.

In this review, the complexity of curriculum planning is examined at length because it is this particular characteristic that justifies further study of

curriculum planning and the search for new models and theories.

Inevitability

Eisner (1979) says that curriculum planning is something done by everyone who provides an educational program. Planning may be short-term or long-term, shoddy or careful, tasteful or ugly, appropriate or inappropriate. Whatever the quality of the planning, decisions on what's to be done are inevitable (p. 34). Macdonald and Purpel (1987) observe that, notwithstanding its short history, curriculum planning, both as practice and theory, is so pervasive in education that it "approaches a sense of inevitability" (p. 179). In modern societies, curriculum planning is a legally mandated, continuous responsibility of schools, school boards, and ministries of education. They are responsible for providing students with the best possible learning opportunities, requiring curricular improvements in response to changing needs and circumstances.

Significance

The singular importance of curriculum in educational planning is affirmed in the literature (e.g., Banghart &

Trull, Jr., 1973; Eisner, 1985). In fact, one of the main purposes of curricular literature is to convey the importance of curriculum inquiry and planning (Schubert, 1986, p. 5).

Existing perceptions of theorists of the ultimate concerns of curriculum illustrate its importance. Schubert (1985) states that curriculum planners are concerned with no less than the fate of children - how to turn their lives toward greater growth, goodness, and enlightenment. At the heart of the process, he says, are fundamental questions of what knowledge is most worthwhile and why, and how it is acquired (p. 5).

Huebner (1975b) argues that curriculum planning is ultimately concerned with questions of human destiny, finitude, and morality. In a recent speech, Eisner and Jackson emphatically declare that "nothing matters more than curriculum matters" (cited in Schubert, 1986, pp. 5-6).

The importance of curriculum planning warrants its continuing investigation to improve understanding and practice. To shirk this responsibility is to permit educational practice to be governed by mindless action and taken-for-granted behavior (Schubert, 1986, pp. 5-6).

Complexity

The overwhelming complexity of curriculum inquiry and planning is widely acknowledged in the literature (Macdonald & Purpel, 1987; Schubert, 1986; Zais, 1976). Its language and processes are rooted in metaphysics, philosophy, epistemology, psychology, and ethics. Curricular ideas, decisions, and practices are socially, politically, and culturally influenced and powerfully affected by the economic and legal contexts in which they occur. Both the planning process and the plans produced reflect conscious and unconscious conceptions of life and education and the customs and fads of particular times and places.

Other factors that contribute to curricular complexity are as follows: the many decision-making authorities involved; the large numbers of people and institutions affected; the personal relations among participants in the planning process; the nature of the leadership provided. Epitomizing the magnitude and complexity of curriculum planning is the learner, whose nature ultimately defies comprehension, perpetually occupying the attention of poets, playwrights, historians, philosophers, theologians, and curricularists (Huebner, 1975a). Eisner (1979) states that "the denial of

complexity in educational matters is the beginning of tyranny" (p. 211).

The following subsection explores the complex nature of curriculum planning with reference to underlying philosophical assumptions and theories, definitions of curriculum, and existing paradigms, or models, of the process. This is followed by an examination of the potential contribution of theoretical models to curriculum inquiry and practice.

Philosophical and ideological orientations.

This review of assumptions and theories is intended to show the philosophical nature of curriculum questions and to illustrate the plurality of existing theoretical positions contributing to the complexity of curriculum planning. The compatibility of different theoretical orientations and the possibility of integration and synthesis is also examined.

The philosophical character of curriculum is reflected in perceptions of the issues with which curriculum planning is ultimately concerned: with what it means to live a good life and how a just society can be created (Schubert, 1986); with how to become a "good" person, live a "good" life, and make a "good" society

(Macdonald & Purpel, 1987); with human liberation, freedom, and social justice (Macdonald & Purpel, 1987); with questions of what is a person, why is s/he here, where is s/he going, and how does s/he fulfill his/her destiny (Beniskos, 1980); with development of character and Christ-like conduct (Byrne, 1981); and with morality, finitude, and destiny (Huebner, 1975a).

Thompson (1951) surveys statements made on the purpose of education. The following is a sample of his findings. The purpose of education is character development and morality (Plutarch, Herbart); perfect development (Plato, Rabelais, Montaigne, Comenius, Locke, Parker); happiness (Aristotle, John Stuart Mill); truth (Socrates); citizenship (Luther, Milton); preparation for the future (Kant); self-realization (Dewey, Tufts); and the satisfying of wants (Thorndike, Gates) (pp. 145-146).

Macdonald and Purpel (1987) emphasize the philosophical character of curriculum planning in this way:

Any model of curriculum planning is rooted in a cluster of visions - a vision of humanity, of the universe, of human potential, and of our relationships to the cosmos. These visions, though dimly viewed and rarely articulated,

nonetheless have a profound impact on our day-to-day educational practices, and upon our more theoretical formulations. (p. 192)

Many philosophies and schools of thought contribute form and force to curriculum planning. Schubert (1986) identifies metaphysics, epistemology, axiology and ethics, aesthetics, logic, and politics as perpetual influences on curricula and curricular processes (pp. 116-127). Schools of philosophical thought that have a direct impact on curriculum inquiry are idealism, realism, neo-Thomism, naturalism, pragmatism, existentialism, and phenomenology (Schubert, 1986, pp. 127-131). This philosophical diversity in curriculum theory has been classified according to various schemes.

Schubert (1986) labels curriculum theory as either descriptive, prescriptive, critical, or personal (pp. 132-134). Descriptive theory defines, describes, predicts, and directs. It is based on the examination of empirical data (Beauchamp, 1982, pp. 23-27). Prescriptive theory involves the formulation and justification of principles. It states what ought to be done in a range of practical activities (Hirst, as cited in Tibble, 1966,

p. 55). Critical theory attempts to assess existing and emerging ideological forms, to rethink and radically reconstruct the meaning of human emancipation, to engage in self-conscious critique, and to develop a discourse of social transformation and emancipation (Giroux, 1983, pp. 7-8). Personal theory emphasizes existential experiences. It focuses on temporality, transcendence, consciousness, and politics (Pinar, 1975, pp. xii-xiii).

This four-part categorization is just one of many categorizations in the literature. Dewey (1902) acknowledges diversity in curriculum approaches when he identifies two "sects", one that "fixes its attention upon the importance of the subject matter of the curriculum" and the other that considers the child as "the starting point, the center and the end" of the curriculum (cited in Hyman, 1973, p. 17). Huebner (1978) identifies six different kinds of curriculum theory: descriptive, explanatory, controlling, legitimizing, prescriptive, and affiliative. Macdonald (1975) discusses knowledge-oriented, reality-oriented, and value-oriented curricula (cited in Pinar, 1975, pp. 9-13). Kliebard (1985) categorizes curriculum theory as follows: traditional humanist, social efficiency, human development, and social meliorism (pp. 33-44). Other classifications

include Prakash and Waks' (1985) four conceptions of excellence, Eisner's (1979) five orientations, Schiro's (1978) four ideologies, Orlosky and Smith's (1978) styles, McNeil's (1981) curricularists, Miller's (1985) orientations and metaorientations, and Hyman's (1973) thirteen approaches. Curricula, say Taylor and Richards (1985), embody beliefs, values, and sentiments that invest the educational enterprise with different kinds of meaning, referred to as conceptions, orientations, and ideologies. Conceptions and orientations are individual phenomena; they are idiosyncratic and as numerous as the people who hold them. Ideologies, on the other hand, are social phenomena. They reflect views held by groups of people. Consequently, ideologies are fewer in number than conceptions and orientations. Taylor and Richards confirm what is apparent from this review. There is considerable diversity in theoretical assumptions and an ever-expanding stock of conceptions of the what, why, and how of curriculum and curriculum planning (pp. 16-37).

Perceptions of the compatibility of curriculum theories vary as much as the theories themselves. Some theorists argue that they are completely incompatible; others contend that an eclectic approach is possible and preferable (Dewey, 1929a,b; Rist, 1977; Schubert, 1978;

Pratt, 1981) seeks to reconcile theoretical polarities; Pinar (1978) advocates a synthesis of disparate perspectives (pp. 205-214).

The profundity of curriculum questions, their philosophical character, and the diversity of theories and values affecting curriculum planning all contribute to process complexity. Complexity is also characteristic of the definitions of curriculum.

Definitional concerns.

In continuing to explore the complex nature of curriculum planning, curriculum definitions in the literature and related controversies are examined. Historical shifts in the definition of curriculum and support for curriculum as a planned phenomenon are also considered.

Eisner (1985) observes that in educational discourse the term curriculum is defined as broadly as "what schools teach" and as narrowly as "a specific educational activity planned for a particular student at a particular point in time" (p. 39). The three definitions given below run from one end of this spectrum to the other.

Curriculum must consist essentially of disciplined study in five great areas: (i) command of the mother tongue and the systematic study of grammar, literature, and writing; (ii) mathematics; (iii) sciences; (iv) history; (v) foreign languages. (Bestor, 1955)

Curriculum in a general sense is an expression of selected values a culture desires to transmit to the young. (Bullough et al., 1984, p. 65)

Curriculum is all the experiences the learner has under the jurisdiction of the school. (Beauchamp, 1964, p. 5)

Zais (1976) identifies the following current conceptions of what is meant by curriculum: the program of studies; course content; planned learning experiences; experiences had under the auspices of the school; a structured series of intended learning outcomes; a (written) plan of action (pp. 6-14). Tanner and Tanner (1980) identify nine very different and sometimes conflicting conceptions, including the following not cited

by Zais: modes of thought, cognitive and affective content and process, technological system of production (p. 42). Schubert's discussion of existing curriculum concepts adds to the list: cultural reproduction, an agenda for social reconstruction, currere - a person's reconceptualization of his or her autobiography (1986, pp. 26-34).

The study of curriculum definitions has produced several classification schemes. Hosford (1973) groups definitions in four categories: the everything-that-happens group, the everything-that-is-offered group, the planned-what-and-how group, the planned-what-only group (pp. 16-18). Similarly, Schiro (1978) speaks of three major viewpoints reflected in current curriculum conceptions: curriculum as object, curriculum as interaction, and curriculum as intent (pp. 24-26).

Another popular way of viewing curriculum definitions is by placing them on a continuum. One such continuum extends from a definition of curriculum as "a mere course of study" all the way to a definition of curriculum as "all the experiences had under the auspices of the school", including currere (Pinar & Grumet, 1976). In the middle of the curriculum continuum is the definition of curriculum as the interaction of students,

teachers, and the environment in pursuit of educational goals (Miller, 1985, p. 3). Instead of one continuum, Connelly and Lantz (1985) discuss curriculum definitions as falling along two continua, a means-ends continuum and an existential-personal continuum (pp. 1160-1161).

This plurality of conceptions and classifications of curriculum is accompanied by controversy over the feasibility and the desirability of a universal definition of curriculum and over the relation between content and process. For example, Johnson (1967) argues that the absence of a single definition of curriculum contributes to confusion and is a major hindrance to progress in curriculum theory and practice. On the other hand, Zais (1976) considers the search for a single definition pointless; he states that the definition of curriculum necessarily varies according to the purpose to be accomplished (p. 14). Tanner and Tanner (1980, p. 43) and Schubert (1986, p. 34) also argue that there is a need to cultivate a variety of definitions in order to move closer to understanding the whole picture of curriculum.

Dualism refers to the distinction between curriculum and instruction. Johnson (1967) believes that curriculum prescribes the ends of instruction (the results) but not

the means - i.e., the activities, materials, and instructional content used to achieve the results. Eisner (1985), on the other hand, argues that in practice ends and means are inseparable. Although they may be distinguished for the purpose of inquiry, they cannot be considered in isolation from each other (p. 42).

An historical overview of the shifting definitions of curriculum is provided by Lewis and Miel (1972), Tanner and Tanner (1980), and Stellar (1983). The oldest and most enduring definition, sometimes referred to as the classical definition, is the view that the curriculum is equivalent to the content of textbooks (Stellar, 1983). During the 1920s and early 1930s the focus was on fashioning courses of study according to a set plan (Lewis & Miel, 1972, pp. 17-24).

A significant departure from this traditional view of curriculum occurred in the mid-1930s with the publication of Caswell and Campbell's book on curriculum (Stellar, 1983, p.72). It reflects a reaction to a perceived discrepancy between the written curriculum and the curriculum in use. Attention is focused on the problem of distance between intention and practice. Caswell and Campbell (1935) state that the curriculum should not be defined as the course of study but as the

experiences that children have under the guidance of teachers in school (Lewis & Miel, 1973, p. 18). Stellar notes that for the next 30 years most educational scholars used variations of the "curriculum as experiences" or traditional interpretations (p. 72) to discuss curriculum. The notable exception, according to Stellar, was the progressives, or open educators, who believed that as the young mature they should be able to follow their own bent and choose topics, times, and teachers, and that teachers should be permitted to teach what they themselves consider important (p. 72).

Lewis and Miel (1972) note that eventually some curriculum thinkers found the extensive reach of the progressive's conception of curriculum problematic for the following reasons: the difficulty of studying and evaluating intangible experiences; the lack of attention given to the planning of curriculum; the concentrated focus on learning to the neglect of teaching (p. 18). In the 1950s, a careful analysis of the language and concepts of education was made. This resulted in the use of other terms for experience, such as learning opportunities and learning engagements (Lewis & Miel, 1973, p. 19). Also, the idea of a balance between the unplanned, unanticipated teachable moment and the formal,

prespecified curriculum came into favor (Stellar, 1983, p. 72).

This new emphasis on the planned nature of curriculum manifested itself through numerous definitions that surfaced in the 1950s. Stellar (1983) cites the following definitions: "all of the learning of students which is planned by and directed by the school to attain its educational goal" (Tyler, 1957); "a plan for learning" (Taba, 1962); "a plan for providing sets of learning opportunities for persons to be educated" (Saylor & Alexander, 1981).

Eisner argues that whatever the conception of curriculum, the school cannot function without some kind of program (1985, p. 41). This definition also views the program (curriculum) as a planned phenomenon - "a series of planned events that are intended to have educational consequences" (p. 45).

Despite the current popularity of this "planned" conception, there is no consensus on a definition of curriculum, but the definitional controversy is indicative of the complexity of curricular phenomena. This complexity is also illustrated by the diversity of paradigms of planning and classification schemes, as discussed in the next section.

Paradigms of curriculum planning.

In the literature the term paradigm is used as follows: as a synonym for a model or representation of a specific set of events in theory development; and as an example of the constellation of beliefs, values and practices shared by a scientific community (Beauchamp, 1981, pp. 27-28).

According to Fawcett and Downs (1986), a conceptual (theoretical) model is synonymous with a paradigm defined in both ways. It is a set of abstract and general concepts and propositions that provides a distinctive frame of reference for phenomena. It also reflects the philosophical stance, cognitive orientation, and research traditions of a group of scholars (p. 83).

Schubert's notion of paradigm as a conceptual framework of values and rules that guide inquiry (1986, p. 182), like Fawcett and Downs' definition of conceptual model, implies representation of phenomena as well as conceptualization of how to proceed.

The review of the literature on planning paradigms is undertaken for the same reason as the examination of philosophical assumptions and definitions of curriculum: to further explore the complexity of the curriculum

planning process and to justify further investigation in pursuit of a more sophisticated understanding of the process and improved educational practice.

Different kinds of curriculum planning are identified in the literature: top down (Zais, 1976); grass-roots (Zais, 1976); naturalistic (Walker, 1971); cooperative action research (Smith et al., 1957). As well, there is a variety of comprehensive classification schemes. Hyman (1973) identifies thirteen different approaches. Similar categorizations are made by Connelly (1973) and Walker (1979).

The recent classification of curriculum planning processes by Schubert (1986) as empirical-analytic; practical (hermeneutic); and critical (emancipatory) is reviewed here in some detail because Schubert's schema seems to have the support of other theorists. For example, his categories resemble the categories of Macdonald (1975) - linear-expert, circular-consensus, and dialogical - and Schwab (1970) - the theoretic and the practical (1970).

The empirical-analytic paradigm encompasses modes of curriculum planning that represent a merging of the Tyler rationale and technical rationality. It is oriented to molding students in prespecified ways. It is similar to

Macdonald's linear-expert model, which is linear, goal directed, dominated by experts, and control oriented (p. 292). According to Schubert, the empirical-analytic paradigm has become the dominant, perennial curriculum planning paradigm (p. 314).

The practical paradigm, derived from Dewey and Schwab, depicts curriculum as evolving from the educational situation rather than being predesigned elsewhere, delivered, and implemented. This evolution occurs through the interaction of teachers, learners, and curriculum developers in ongoing deliberation about the influence of subject matter, milieux, and one another. In spite of the label practical, the role of theory is crucial. Theory must be understood and used in planning by choosing, matching, tailoring and combining, as necessary, to enlighten and guide the decision-making process. Again, there is a parallel with Macdonald's circular consensus model, which employs group decision processes and in which consensus and communication are more important than control (Macdonald, 1975a, p. 292).

Critical praxis refers to the unity of inquiry and action. It is a loosely connected paradigm of various philosophical perspectives: existentialism, phenomenology, critical theory, and personal theorizing.

Schubert (1986) argues that critical praxis comprises the curricular interests of the reconstructionists of an earlier era and those of the reconceptualists of today. This paradigm is based on the assumption that individuals are oppressed as a result of ideological and socioeconomic forces. It combines social critique and action to improve both society and the individual through education. Some critical theorists, the phenomenologists, for example, are concerned with the personal search for meaning and understanding. According to Schubert, a strong theme in the work of many reconceptualists is the bringing to consciousness of the "taken-for-grantedness" of the one dominant epistemological paradigm: the theoretic, to use Schwab's (1969) language; the conceptual-empirical, to use Pinar's (1978) designation; the social-behavioral, to use Schubert's (1968) characterization; and the neopositivist to use conventional philosophical discourse. Common characteristics of the pluralistic paradigm, critical praxis, include an organic view of nature, a view of people as creators of knowledge, an experiential method, and political and social reconceptualization. The following are questions frequently asked of education by critical theorists: How is knowledge reproduced in schools? What are the sources of that

knowledge? How do students and teachers resist and contest that which is conveyed through the lived experience in schools? Whose interests are served? How can schooling empower students to attain greater liberation, equity, and social justice? (Schubert, 1986, p. 315). Schubert's (1986) critical praxis classification and Macdonald's (1975a) dialogical model are both concerned with human emancipation.

The comparison of various paradigms of the curriculum process is also made in the literature. Schwab (1970) compares theoretical and practical models according to the origin or source of their problems, their methods of inquiry, their subject matter, and their results. Connelly (1972) compares external-based and user-based curriculum planning on the basis of ends, starting points, methods, and functions. Macdonald (1975a) examines his ideal types, or models, in terms of interests served and their value orientations. Schubert (1986), drawing on Habermas's analysis of science (1971) and the work of Bernstein (1976), Giroux (1980), and Hultgren (1982), compares his three paradigms on the basis of the interests they serve, the kinds of social organization they employ, and the modes of rationality they prize (p. 181).

It appears from the literature that all curriculum planning models, however classified and compared, are characterized by rationality, purpose, future orientation, continuousness, valuation, and complexity. These features were found earlier to be generic to educational planning and to planning in general. Nevertheless, no two curriculum planning process classification schemes are exactly alike; in some cases there are important differences, particularly with respect to their value orientations and modes of rationality. As well, the various paradigms of planning differ in their implications for the following: the locus of planning; the participants in the process; the kind of personal relations required; the kinds of organization, administration, and leadership valued; and the extent to which contextual (social, cultural, economic, and political) realities are seen as affecting curriculum planning (Schubert, 1986).

The idiosyncratic nature of classification schemes and the overlap among categories of planning models is also acknowledged in the literature. For example, although Tyler is often credited with developing a rationale for empirical-analytic inquiry that serves technical interests, much of his writing on curriculum

and evaluation can be classified as "practical" (Schubert, 1986, p. 414). Schubert also states that inquiry advocated by Dewey does not serve practical interests alone (1986, p. 414). Miller (1985) observes that teachers do not adhere to any one curriculum orientation, but work from a cluster of orientations (p. 181). As well, curriculum guidelines of boards and departments of education reflect multiple theoretical perspectives (p. 181).

Various conceptions of the distinctiveness and use of planning process paradigms are displayed in the literature. Some theorists view them as essentially incompatible approaches (Prakash & Waks, 1985). Others see them as multiple lenses through which curriculum problems can be viewed, or as different avenues to curricular truth (Eisner, 1979, p. 19; Rist, 1973, p. 47; Schubert, 1986, p. 414). There are also those who believe that different approaches can be combined in practice (Short & Jennings, 1976), or that certain paradigms can encompass the elements of other paradigms, although the latter may be reinterpreted and transformed in the process (Prakash & Waks, 1985).

Pinar (1978) argues that there is a need to strive for a synthesis of empirical, interpretative, critical,

and emancipatory curriculum perspectives, contending that synthesis would help regenerate the curriculum field (p. 12). Pratt (1987) discusses the reconciliation of certain theoretical polarities, noting that teachers usually personify a synthesis of perspectives (i.e., humanist and technologist), which indicates that they are reconcilable (p. 151).

Schwab (1969) and Connelly and Elbaz (1980) argue that the problems of curriculum planners and teachers are infinitely varied and complex. Eclecticism and the integration of diverse theoretical perspectives appear to be common at the level of practice. Teachers are "knowers of the practical", whose knowledge is, at the same time, oriented situationally, theoretically, personally, and experientially (Connelly & Elbaz, 1980, pp. 104-117).

The immense complexity of curriculum planning is gradually being sketched more and more, particularly by theorists and practitioners of practical, hermeneutic, and critical orientations. They appear intent on exposing the phenomenon's political nature (Freire, 1985; Kirst & Walker, 1971; Short, 1983); its artistic and aesthetic character (Eisner, 1978, 1985); the influence of social class on curriculum construction (Anyon, 1980,

1981; Apple, 1979a,b, 1982a,b,; Giroux, 1981, 1987); the impact of economic interests (Apple, 1982a,b, 1984; King, 1978); and the influence of organizational culture and hidden curriculum (Apple & Weis, 1983; Jackson, 1968; Sarason, 1982). Coinciding with the efforts to explore the nature of the process in a comprehensive way is a growing interest in attempts to reconcile, integrate, and synthesize diverse theories and research in trying to better explain curriculum planning.

Summary

The review of curriculum literature was undertaken to explore the nature of curriculum planning and to establish that there is a need for theoretical models that incorporate a range of theories and findings.

The historical survey established that curriculum planning has occupied peoples' attention since ancient times. However, it is only in this century that curriculum planning has evolved into a distinct field of educational inquiry (Schubert, 1986, p. 70).

The examination of the curriculum planning process was centered on three characteristics: inevitability,

significance, and complexity. The last characteristic, complexity, was investigated in terms of the diversity of philosophical assumptions, definitions of curriculum, and the existing paradigms, or models, of the curriculum planning process.

Curriculum planning was found to be an inevitable and complex phenomenon, of singular importance to education. Its complexity is considered to be fundamentally attributable to the profundity of curriculum questions.

The review of theoretical influences established the philosophical nature of curriculum planning and the high profile of values and beliefs in the process. Perceptions about the compatibility of theory classifications were found to vary among theorists; however, some theorists support the integration of different theoretical perceptives.

The diversity of definitions of curriculum was found to span a spectrum extending from the very specific to the very general. Areas of controversy were noted, as was the gradual shift in this century to a definition of curriculum as a planned phenomenon.

How curriculum planning occurs was investigated in terms of types of planning, planning paradigms, and paradigm classifications discussed in the literature. It

was found that the curriculum planning process, however labelled and classified, is conceived of as exhibiting the characteristics identified previously as generic to planning as a general phenomenon. The generally idiosyncratic character of descriptions and categorizations of the process was revealed; overlap and a lack of mutual exclusiveness in paradigm classification schemes are common. As with planning theory in general, it was found that perceptions of the curriculum planning process paradigms run the whole gamut from compatibility to incompatibility. Support for eclecticism, reconciliation, integration, and synthesis was shown to exist, but no integrating models are available. In spite of the lack of interpretative-theoretical models in the literature, the integration and synthesis of different curriculum orientations and approaches at the level of classroom practice appears to be generally accepted as the norm.

In concluding the review, current efforts to expose the diverse interests affecting the curriculum planning process - personal, political, social, and economic - were highlighted, emphasizing that the complex nature of curriculum planning continues to be sketched more and more in the literature. Consequently, the search

continues for new models to provide a better understanding of the curriculum planning process necessary for effective, efficient practice.

The next section examines the role of models in curriculum theory and practice. The chapter concludes with an explanation of the problem and purpose of the study, which were briefly stated at the beginning of the chapter.

The Role of Models

Models are representations of phenomena; they enlighten by analogy (Connor, 1969, p. 90). Models can take the form of objects, pictures, verbal descriptions, or abstractions. They can represent a single activity or complex process. Sometimes an entire philosophical system functions as a model (Belth, 1965, p. 91).

Models are acknowledged as having a prominent role in curriculum inquiry (Jenkins & Shipman, 1976; Miller, 1985; Oliva, 1982; Zais, 1976). Their popularity stems from their value as aids to understanding the complex phenomenon of curriculum. There is no consensus in curriculum literature on fundamental principles and

concepts, and the vicissitudes of practice are difficult to account for completely (Jenkins & Shipman, 1976, p. 89).

Among the virtues ascribed to models in general is their power to illuminate a phenomenon; surface features are obliterated and essential organization is highlighted (Jenkins & Shipman, 1976, p. 89). The usefulness of models in translating several theories or a range of working hypotheses of various researchers, converting them into frameworks for further inquiry and practice, is also acknowledged (Bagnall et al., 1980, p. 58). With respect to the use of models in curriculum planning, Oliva (1982) states that they can facilitate an understanding of the process and contribute to greater efficiency and productivity (pp. 155, 171).

There are various types of models (see Belth, 1965, p. 91; Block, 1966, pp. 219-243; Caws, 1974, pp. 1-10; Zais, 1976, p. 92). Zais categorizes them as follows: physical models, mathematical and graphic models, and conceptual models (p. 92). Conceptual, or theoretical, models are viewed as resulting from a process of "creative imagination" (Halpin, 1958, p. 5). Their value lies in the integration of different perspectives, which assists understanding, theory building, and the creation

of better guides to practice (Zais, 1976, p. 92). Oliva (1982) contends that continued study of curriculum planning will result in the refinement of earlier models (p. 167). Jenkins and Shipman (1976) state that allegiance to any prior conceptualization cannot be demanded. The curriculum planning process is always open to reconceptualization as a result of new insights and experiences (p. 89).

The Problem of the Study

According to the literature, curriculum planning is an inevitable, significant, and highly complex process in need of further study in the interests of improved theory and practice.

Zais (1976) notes the lack of any well-developed theory of curriculum (pp. 93-94). Instead, there are "concepts, rules of thumb, perspectives, and frames of reference" (Eisner, 1979, p. 48). Beauchamp (1981) also notes the need for more curriculum theorizing.

The inadequacy of existing models of planning are discussed in the studies done by Walker (1969, 1971, 1975). He suggests that existing models do not

accurately reflect the curriculum planning process. Macdonald and Purpel (1987) argue the need for freedom "from the narrowness of the existing mechanistic and control oriented paradigm" (p. 192).

The value of theoretical models to curriculum inquiry lies in their capacity for integrating a range of theories, hypotheses, and findings, thus providing direction for further inquiry and practice (Bagnall et al., 1980, p. 58). Dobson and Dobson's observation that "the epistemological base of curriculum theory is diverse perceptions of reality" (1987, p. 275), underscores the value of theoretical model building. The potential of model building is implied in Walker and Soltis's recent comparison of Tyler's, Schwab's, and Freire's procedures for curriculum development. They observed considerable consistency among what are commonly understood to be disparate planning approaches (1986, pp. 43-55).

The absence of theoretical models of curriculum planning in the literature also justifies this study. The efforts of Pratt (1987) to try and reconcile several traditional polarities in curriculum theory appears to be in the spirit of theoretical model building. Other such efforts can be cited; for example, Miller and Sellar's meta-orientations framework (1985, p. xi). Theoretical

models of the type proposed in this study, employing an interpretative-theoretical methodology, have been developed for one of the subphases of curriculum planning, namely curriculum implementation (Common, 1978; Wright, 1982). However, there are no known comprehensive interpretative-theoretical models of curriculum planning. The purpose of this study is to provide such a model.

The Purpose of the Study

Curriculum planning is rational, purposeful, future oriented, continuous, and value laden, as is all planning. It is also an inevitable, significant, complex process. The immense complexity of the curriculum process is illustrated by the diversity of assumptions and values, the variety of meanings and definitions, and the number of process paradigms found in the literature. Current understandings about curriculum planning include the view that the curriculum process is not purely objective or scientific, but that it is also an "artistic" endeavour, often chaotic and capable of being highly political (Eisner, 1985; Schwab, 1975; Walker, 1971). It requires negotiation, intuition, initiative,

creativity, experimentation, negotiation, and educated guesses (Gay, 1980, p. 120).

While it has been shown that curriculum as a planned phenomenon currently commands considerable support in the literature, paradigms of the process were found to be idiosyncratic and overlapping rather than mutually exclusive. It appears that teachers and curriculum planners, rather than adhering to any one orientation or paradigm, work from a cluster of theoretical perspectives. Furthermore, it was found that more and more voices are being raised in support of eclectism, integration, reconciliation, and the synthesis of different theoretical perspectives, in the interest of more sophisticated curriculum theory and better guides to curriculum practice. Frameworks, or models - particularly theoretical models - were identified as being useful for integrating a variety of findings, insights, and theories about the nature of the curriculum planning process.

Most of the models of curriculum planning in the literature are prescriptive; they reflect the particular theoretical orientation of their proponents. Walker (1971) developed a descriptive model of planning for an art curriculum project, which he labelled naturalistic.

Support for the development of a theoretical model based on a comprehensive review of what is known about the process also exists in the literature. Mouly (1978), in describing the process of theorizing, observes that no theory is ever complete or incorporates all that is involved in a given phenomenon (p. 37). Conant (1951) says that "a conceptual scheme is either modified or replaced by a better one, never abandoned with nothing left to take its place" (p. 123). In other words, in trying to comprehend curricular phenomena, existing conceptual schemes and theories are modified or replaced by more sophisticated models and theories that incorporate more information and further clarify relations.

Common (1978) developed a theoretical model for curriculum implementation, using an interpretative-theoretical methodology. She describes the model as "an innovative and seminal way of thinking about what is known about [curriculum implementation]" (p. 275). The contextual model of curriculum implementation developed by Wright (1980) incorporates factors affecting curriculum implementation that were not included in previous models of the process (p. 197). Their work illustrates the potential of theoretical model building, not only for subphases of curriculum planning, but also for the

process as a whole.

The purpose of this study is to develop a model of curriculum planning that provides a comprehensive theoretical explanation of the curriculum planning process and that can serve as a guide to practice.

Models that can be described as theoretical must be developed through a rigorous methodology. The methodology used in this study is based on the interpretative-theoretical mode of research described by de Groot (1969) and theoretical model building as discussed by Dubin (1978).

Summary

In this chapter, a theoretical rationale for the study was presented. The nature of planning was examined and the legitimacy of curriculum planning as an educational planning subfield was established from the literature.

The lack of a comprehensive theory of curriculum planning, and the significance, inevitability and complexity of the process were discussed as justification

for further study of the phenomenon.

The role of models in education generally, and the power of theoretical-model building in particular to enlighten understanding of curriculum planning and assist in practice, was explored. The purpose of the study, to develop a theoretical model of curriculum planning through an interpretative-theoretical methodology of research, was also discussed.

A detailed explanation of the study's methodology is given in the next chapter.

CHAPTER II: METHODOLOGY

Introduction

The significance of theoretical activity in disciplines other than education is discussed by Toulmin (1967), Hanson (1965), and Katen (1973). Toulmin states that breakthroughs in knowledge are made when new perspectives on old problems and old facts are acquired and new rules of inference and interpretation are discovered. Referring to theoretical activity in the natural sciences, Hanson states that "fundamentally, physics is primarily a search for intelligibility ... a philosophy of matter. Only secondarily is it a search for objects and facts" (p. 18). Katen (1973) states that "in science and in all life, understanding is not a matter of fact gathering but of interpretation of fact, and for that a theoretical framework or model is required" (p. 341).

Beauchamp (1981) considers theorizing to be essential to the field of curriculum development. He says that "more [theorizing] has to happen" (p. 46) and notes that "too few curriculum specialists have responded to the need for thoughtful theoretical work" (p. 65). Other voices raised in support of the development of theoret-

ical frameworks or models include Berman (1968), Eisner (1985), Hyman (1973), Taba (1962), and Zais (1976).

Models are representations of phenomena; like metaphors, they enlighten by analogy (O'Connor, 1969). Although model is sometimes used as a synonym for theory, it more properly denotes a representation of only part of a theory (Zais, 1976). According to Zais, one of the main functions of models is to aid in theory building by economically summarizing and explaining limited areas of the total theoretical domain (pp. 92-93). In curriculum planning, models facilitate the visualization of components, relationships, and processes. They suggest questions and offer clues to possible answers. They are also used as planning tools and research guides.

Theoretical Model Building

According to Halpin (1958), theoretical model building is a process of "creative imagination" (p. 5). It is a response to the human need for order. The only instrument employed in the ordering process, according to Dubin (1978), is the human mind; order is created by the "magic" of human perception and thought (p. 7).

Dubin outlines a developmental sequence for a theoretical model: "the isolation of units (things or variables) whose interactions constitute the subject matter of attention" (p. 7); the formulation of laws of interaction governing these units; the setting of limits, or boundaries, within which the theory is expected to hold; the description of system states which make up the phenomenon.

The methodology of this study corresponds to Dubin's sequence, but it is more prescriptive. It is classified by de Groot (1969) as interpretative-theoretical research; it involves exploration, description, interpretation and classification of data, followed by an holistic explanation of the phenomenon being studied.

In its pure form, interpretative-theoretical research is nonempirical because no effort is made to add to the existing data base (de Groot, 1969). "Essentially," says de Groot, "this type of study consists of the interpretation and theoretical evaluation of a closed set of findings" (p. 309). The data base of this study is knowledge about curriculum planning reported in the literature.

The significance of theorizing is noted by Kaplan (1964), who claims that "almost all advances in the

formulation of new laws [in the behavioral sciences] follow on the invention of theories to explain the old laws" (p. 303). He asserts that theoretical activity contributes to knowledge growth in two ways, by extension and intention. Extension refers to the expansion of the boundaries of existing theory to include new elements. Intention refers to improving understanding of an area of knowledge. "A new theory adds some knowledge," he says, "but it also transforms what was previously known, clarifies it, gives it new meaning as well as more confirmation" (p. 305).

The subject matter of interpretative-theoretical studies is generally so complex that multiple interpretability is the rule rather than the exception. According to Dubin (1978), "it goes without saying that the same set of experiences may be ordered or theorized about in very different ways" (p. 6). Halpin (1958) notes that each theorizing process follows its own particular course of development (pp. 5-6). The grounds of justification of a theory or a model of such complex phenomena, according to de Groot (1969), is whether it makes a contribution to knowledge and insight (pp. 311-312).

Any methodology imposes form on the data being studied. This requires an explanation of how the

theorizer decides which data are relevant to the study and how the data are manipulated in pursuit of study's purpose (Common, p. 14). The methodological process used in this study consists of four distinct phases: exploration and description of data sources, which includes establishing the research orientation and the limits of the investigation; description of existing conditions and relationships; classification, which involves conceptualizing the phenomenon and representing that conceptualization in an understandable format; and, finally, an explanation of the phenomenon using the theoretical model. The purposes and processes of each phase of the methodology are discussed in detail.

Phase One: Exploration

In this phase, data sources are described and the phenomenon of curriculum planning is explored through a framework of basic questions.

Research Questions

Perkins (1984) states that "to make sense of the world ... [one] can ask four questions about any piece

of knowledge: What is its purpose? What is its structure? What are model cases of it? What are the arguments that explain and evaluate it?" (cited in Marzano et al., p. 30).

A comprehensive theoretical explanation of the curriculum planning process requires a thorough examination of what is known about the purpose of curriculum planning, its elements, and how it occurs. Further insight is generated by questions that correspond to Perkins' fourth type. What contextual factors influence curriculum planning? Who are the curriculum planners?

Purpose.

In curriculum literature, purpose is a primary concern (e.g. Goodlad, 1979; Taba, 1962; Tyler, 1949). In this study, the purpose of curriculum planning is investigated through the application of the following research question to the literature:

1. What is the purpose of curriculum planning?

Elements.

Tyler (1949) identifies purposes, experiences, organization, and evaluation as the main elements of curriculum planning. Other elements described in the

literature include an analysis of adult activities (Bobbitt, 1924), the planners' platform (Macdonald & Purpel, 1987), and deliberation (Schwab, 1973). In this study the following research question is used for investigating the elements of curriculum planning:

2. What are the elements of curriculum planning?

Planners.

The question of who should be involved in curriculum planning occupies the attention of all curriculum planning theorists and practitioners. Such factors as legal requirements, technical expertise, and political sensitivities must be considered. For example, teacher involvement in curriculum planning is often justified by the following principle: "Those affected by a policy or program should share ... in its development" (Smith et al., 1957, p. 452). Other theorists (e.g., Schwab, 1983) consider the participation of large groups representing diverse interests and areas of expertise to be integral to the process. The role of students and lay people in curriculum planning continues to be debated (Goodlad, 1979; Walker & Soltis, 1986). In this study, the following research question is used to investigate participation in the curriculum planning process:

3. Who are the curriculum planners?

Contextual influences.

Curriculum planning does not occur in isolation. "Curriculum thoughts, decisions, and practices are socially, politically and culturally constructed. They are powerfully governed by the economic and legal contexts in which they exist ... [and] the values of the day exert profound influence" (Schubert, 1986, p. 93). Curriculum theorists' perennial concern with the impact of contextual forces and influences on curriculum planning is attested to by Bobbitt (1924), Smith et al. (1957), Taba (1962), Goodlad (1979), Eisner (1978, 1985), Apple (1982, 1984), Giroux (1981, 1983, 1985), and Walker and Soltis (1986).

A comprehensive theoretical explanation of the curriculum planning process requires an investigation of contextual factors that influence the process. To guide the investigation of contextual influences on curriculum planning, the following question is used:

4. What are the contextual factors that influence curriculum planning?

Modes of planning.

Existing models of curriculum planning were reviewed in the theoretical rationale presented in chapter I. Various paradigms were described and evidence of overlap between classifications of models was discussed. As well, it was noted that various theorists advocate the integration, reconciliation, and synthesis of different planning approaches. To guide the investigation of modes of curriculum planning in this study, the following research question is used:

5. How does curriculum planning occur?

Clarification of Terms

There is a considerable diversity of definitions for basic terminology in curriculum planning literature. To successfully conduct research into curriculum planning, it is necessary to clarify terms.

Curriculum.

Eisner (1985) defines curriculum as "a program that is intentionally designed to engage students in activities or events that will have educational benefits for them" (p. 46). When compared with other definitions that also treat curriculum as a planned phenomenon,

Eisner's definition appears to be the strongest one. For example, it is more specific than definitions by Taba (1962) "a plan for learning" and Smith et al. (1957) "a sequence of potential experiences set up in the school for the purpose of disciplining children and youth in group ways of thinking and acting" (p. 3). On the other hand, it is more flexible than some other definitions; e.g., "a written plan depicting the scope and arrangement of the projected educational program for a school" (Beauchamp, 1981, p. 206).

Eisner's definition accommodates written and unwritten plans, limited and comprehensive plans, and current and long-term plans. Eisner considers the consequences of the educational program; he states that activities and events intentionally aim at educational benefits for the students. Furthermore, analysis of Eisner's conception of curriculum as a planned phenomenon reveals a close parallel between the characteristics of planning as a general phenomenon and curriculum planning as Eisner defines it. Therefore, Eisner's definition of curriculum is the one used in this study.

Curriculum planning.

Eisner (1985) graphs the scale and scope of curricu-

lum planning. He views planning as encompassing a range of activities from general educational policy to highly specific plans made by a teacher for a class or an individual student.

The scope of planning decisions encompasses current decisions and those that serve as a kind of blueprint for the future. The first type, says Eisner, is exemplified by the kind of curriculum planning that takes place in some progressive schools. In such schools, curriculum decision making is conceived of as a joint effort by the teacher and the students. Such decision making cultivates shared responsibility and exploits educational opportunities as they arise. The second type of curriculum planning is typical of state and national curriculum projects aimed at influencing the long-term education of students and teachers.

In Eisner's opinion, the teacher who decides that the next hour will be devoted to a discussion of the impact of robotics on students' way of life is engaged in curriculum planning, even though such a decision does not result in the creation of written plans, elaborate visual illustrations, or well-designed instructional materials; these are the outcomes of long-term planning.

As a result of long-term planning, the curriculum takes on a physical existence; it is embodied in a set of materials that may be inspected, adapted, and transported, as necessary. Eisner refers to the second type of planning as the intended curriculum and the first type as the operational curriculum (p. 47).

Curriculum development.

The term curriculum development is often used interchangeably with curriculum planning. Taba (1962) and Saylor and Alexander (1981) make no clear distinction between the terms. Eisner (1985) poses the question "What is curriculum planning?" and then defines curriculum planning using the term curriculum development (p. 128). Beauchamp says, "I use curriculum development and curriculum planning as one and the same notion. I see no real distinction between the two" (p. 22). In this study curriculum development and curriculum planning are both used to refer to the ways in which curricula are formulated, implemented, evaluated, and changed.

Curriculum engineering.

Curriculum engineering is another term used in the literature; it appears to be used synonymously with

curriculum planning. Beauchamp (1987) defines curriculum engineering as "All the processes and activities necessary to maintain and improve a curriculum system" (p. 206). He says that curriculum engineering involves the organization and direction of operations necessary to produce, implement, evaluate, revise, and maintain the curriculum in a dynamic state (pp. 142-143). However, curriculum planning and curriculum development are used much more frequently than curriculum engineering to refer to the processes of formulating, implementing, evaluating, and changing a curriculum.

Curriculum design.

This term usually refers to the organizational relationships (patterns) among curricular purposes, structures, elements, and learning opportunities (Beauchamp, 1983; Schubert, 1986; Taba, 1962). For some theorists (e.g., Pratt, 1980) design has a broader meaning; it is synonymous with curriculum planning. Generally, however, design is considered a subset of curriculum planning. In this study, the limited definition of curriculum design is adhered to.

Curriculum implementation.

This term refers to the enactment phase of curriculum planning (Wright, 1982). It follows the formulation phase and precedes the evaluation phase. However, Miller (1985) points out that although the implementation phase is distinct from the formulation and evaluation phases, it is inevitably linked with both.

Curriculum evaluation.

Curriculum evaluation is commonly viewed as the process of judging the worth of a curriculum (Beauchamp, 1981; Rogers, 1983; Saylor et al., 1981; Schubert, 1986). It is often considered the third phase of the curriculum planning process. Evaluation is being recognized more and more as a complex process that is not only a phase of curriculum planning, but something that permeates curriculum change at all levels and in all phases (Eisner, 1985; Miller, 1985).

Operational Definitions

To extract examples of curriculum planning from the literature, the researcher must be able to distinguish between curriculum planning and other curricular phenomena. Therefore, the following are adopted as

operational definitions for the study:

1. Curriculum: "A program that is intentionally designed to engage students in activities or events that will have educational benefits for them" (Eisner, 1985, p. 45).

2. Curriculum Planning: All of the procedures and processes involved in creating, implementing, and evaluating a curriculum. In this study, curriculum planning is used interchangeably with curriculum development.

The focus of this study, and, therefore, the application of these definitions, is confined to curriculum planning carried out in the formulation or modification stage of a program intended for future use, as opposed to planning for instruction after a program is developed.

Identification of Data Sources

The size of the potential data base of this study necessitated the application of selection criteria. One possible approach was to limit major data sources to books on curriculum planning. This approach was rejected because of the vast number of such books and because such publications as journal articles, research reports, and dissertations would not be included. Another possible approach was to investigate the works of scholars and

researchers recognized for their contribution to curriculum theory and practice. A review of the literature shows, however, that very few theorists enjoy universal recognition. A theorist's contribution is usually valued most by those who share the same theoretical orientation. Another possible approach was to select the works of representatives of various theoretical orientations. Given the variety of classification schemes and the lack of mutual exclusivity among them, as discussed in the theoretical rationale presented in chapter I, no single scheme appeared suitable for data source selection.

Each of these methods of selecting major data sources include biases that could affect the objectivity of the study. The difficulty of justifying selection criteria is acknowledged by Schubert (1980). He states that the use of any set of rules or criteria of selection involves judgement. Nevertheless, selection criteria are necessary and they should be as explicit and objective as possible so that the potential for replicability is increased.

Synoptic curriculum textbooks, which are used mainly at the college and university level, first appeared in the 1930s in response to the proliferation of curricular trends and the need to keep up with modern developments.

They usually summarize the major contributions to curriculum thought and practice, thereby giving readers a state-of-the-art portrayal. According to Schubert, the major function of synoptic texts is to introduce new members to the curriculum field (1980, p. 76; 1986, p. 46). It would appear, therefore, that researchers in curriculum theory and practice cited in current synoptic textbooks are potential data sources for the study. As well, frequency of citation in these texts would seem to be indicative of the importance of an author's contribution. Therefore, the major data sources for the study were selected according to the following criteria: researchers who report curriculum development research or offer conceptualizations of the curriculum planning process and who are frequently cited in current college-level synoptic curriculum texts. The process used to find the appropriate sources is described in the following pages.

Selection of Sample

In this study, major data sources constitute the sample upon which the investigation is based. Answers to the research questions are derived from major data sources; other sources are used to help clarify the

answers. A description of the selection process is essential to an assessment of the extent to which the model can be generalized.

Major data sources were chosen according to frequency of citation in current college-level curriculum textbooks (i.e., synoptic texts on curriculum theory and practice). Textbooks published between January, 1980, and June, 1986, were identified through a computer search of the National Library of Congress (LCMARC database: File 426). A manual search of Canadiana was conducted for Canadian books published during the same period. The descriptor employed in the computer search was curriculum planning, which included the descriptor curriculum development. Thirty-three textbooks were found through the search; a total of 438 curricular researchers were cited. The number of citations for each author were tallied and ranked (see Appendices A and B).

Assuming that frequency of citation indicates the importance of a researcher's contribution to current theory and practice, it was necessary to establish a minimum citation limit. Given also that no large differences exist between adjacent frequency counts, thereby establishing a natural cutoff point (see Appendix B), an arbitrary choice was necessary.

The minimum limit was set at 61 citations. The difference between the lowest and the highest frequency rankings is 203 citations; the highest ranked data source is cited more than four times as often as the lowest ranked data source. Accordingly, 12 researchers were selected as major data sources. This sample was judged to be adequate for the purpose and scope of the study.

Given that most authors and researchers have written several monographs and articles on the subject of this study, it was necessary to further limit the data base to one monograph or several articles by each of the 12 researchers. The criteria used to select articles and monographs were based on the central research question of the study: What is the nature of curriculum planning? Essentially, the study is concerned with understanding the process of curriculum planning and how it occurs. Therefore, two preliminary investigative questions were employed, and only monographs or articles providing the most comprehensive answers to these questions were chosen: What is the curriculum planning process? How does the process occur?

Organization of the Data Sources

Curriculum planning sources can be organized in a

variety of frameworks. Connelly (1972) employs the classification user-based and externally-based. Walker (1979) uses similar designations: site-specific and generic. Short (1982) identifies three types of comprehensive curriculum planning: generic/scholar dominated/implementation-as-directed; generic/milieux expert-dominated/limited adaptation; site-specific/balanced-coordinated/open adaptation. An organizing scheme by Connelly and Ben-Peretz (1980) focuses on the role of the teacher in curriculum development. They speak of the teacher-proof approach, teachers-as-active-implementors approach, and teachers-as-users-developers approach.

Categorizing curricularists according to their philosophical, conceptual, and methodological orientation is another common approach. Schubert (1986) labels theorists as intellectual traditionalists, social behaviourists, or experimentalists. Miller uses three meta-orientations: transmission, transaction, and transformation (1985). Eisner (1985) describes five different traditions. McNeil (1981), Pinar (1978), Shiro (1978), and Macdonald (1975) also offer classification schemes for guiding inquiry into curriculum phenomena. Another approach is to categorize individual curriculum publications on the basis of level of schooling treated

(elementary or secondary), country of origin, curriculum definition, and date of publication.

Each of these methods of organization include biases which can affect the objectivity of the model building process. However, no organizing framework is value free, and data must be systematically presented in interpretative-theoretical studies (de Groot, 1969). Therefore, organization by order of rank according to the total number of times the researcher is cited in current curriculum textbooks (see Appendix B) is used in this study.

Table 1 presents the major data sources for this study. They are identified by author, title, and date of publication, and ordered according to frequency of citation in current synoptic curriculum textbooks.

Presentation of the Data From Sources

The information gathered in the exploration phase is presented in two formats: (a) a written summary of the answers to the research questions, which includes a brief comparison with previous data sources; and (b) a point-form display of the data in a table.

Table 1
Major Data Sources

Authors	Title	Publication date	Citations
Tyler, R.W.	<u>Basic principles of curriculum and instruction</u>	1949	250
Taba, H.	<u>Curriculum development, theory and practice</u>	1962	139
Bloom, B.S.	<u>All our children learning</u>	1981	123
Goodlad, J.I.	<u>Curriculum inquiry</u>	1979	109
Eisner, E.W.	<u>The educational imagination</u>	1985	88
Smith, B.O., Stanley, W.O., and Shores, J.H.	<u>Fundamentals of curriculum development</u>	1957	79
Saylor, G.J., Alexander, W.M., and Lewis, A.J.	<u>Curriculum planning for better learning</u>	1981	72
Sobbitt, F.	<u>How to make a curriculum</u>	1924	68
Doll, R.C.	<u>Curriculum improvement decision making and process</u>	1982	68

(table continues)

Authors	Title	Publication date	Citations
Macdonald, J.B., and Purpel, D.	Curriculum planning: Visions and metaphors	1987	64
Schwab, J.J.	The practical: A language for curriculum	1969	61
	The practical: Arts of the eclectic	1971	
	The practical 3: Translation into curriculum	1973	
	The practical 4: Something for curriculum professors to do	1983	
Tanner, D.L.	<u>Fundamental curriculum development</u>	1981	61

Phase Two: Description

This phase involves the descriptive analysis of the information reported in Phase One. The systematic juxtaposition of data and comparison of data sources in accordance with an explicit and defensible procedure (de Groot, 1969) is the principal activity of this phase.

The systematic, comparative analysis focuses on the similarities and differences among diverse theoretical positions and research findings. The result of this process is an integrative description of the data sources that provides answers to the five research questions. According to Halpin (1958), this facilitates the extension and intention of information from single sources. The description that emerges in this phase must be as accurate as possible because it functions as the referent for the formulation of a classification scheme.

Phase Three: Classification

This phase involves the classification of data into categories. The purpose of this process is to organize information about the phenomenon being studied and to present it in a useful format. Bruner (1967) notes that classifying phenomena renders discriminably different things as if they were equivalent, thus reducing a phenomenon's complexity (p. 231). Posner and Strike (1976) state that categorization schemes should "incorporate what appears from description to be the major distinctions in or about the phenomenon" (p. 667).

Rickman (1967) says that a category usually contains phenomena or the elements and processes of a phenomenon. As well, a category can contain relationships and interdependencies among various phenomena or components of a phenomena. When understood in their totality, a set of categories representing a phenomenon, phenomenal elements, and phenomenal processes will "constitute and illuminate the meaning" of the phenomenon (p. 19).

According to Alexander (1972), the processes of developing a classification scheme are analysis, abstraction, and generalization. Analysis refers to the separate examination of each component of a phenomenon for the purpose of discovering internal construction and function. Abstracting directs attention to each component, separately and in various combinations, to determine their functional relationships. Generalizing is the process of grouping items together in a category.

The adequacy of the criteria used in category development must also be considered. Several factors emerge from the literature as fundamental to an assessment of the adequacy of the categories established in this study:

1. Sufficiency of empirical support.
(Alexander, 1972; Hall & Lindzey, 1970;
Halpin, 1958; Posner & Strike, 1976)
2. Originality (de Groot, 1969; Posner &
Strike, 1976)
3. Power to convey meaning (Rickman, 1967)
4. Significance (de Groot, 1969)
5. Consistency (Halpin, 1958)
6. Generative power (Halpin, 1958)
7. Mutual exclusivity (Halpin, 1958)

In this study, the classification phase provides a way of organizing the diverse, descriptive data from Phases One and Two. Data are sorted using index cards until categories emerge which satisfy the above criteria. The categories are developed for the purpose of answering the following research questions:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence curriculum planning?
5. How does curriculum planning occur?

Phase Four: Explanation

In this phase, categories developed in the previous phase and the relationships among them are explained. Rickman (1967) posits that a set of categories, when understood in their totality, will "constitute and illuminate the meaning of [the] phenomenon being investigated" (p. 19). The adequacy of this explanation, according to de Groot (1969), depends on the adequacy of the classification (categorization) scheme and how the scheme is used in explaining the phenomenon (p. 44). In this study, the conceptualization of relationships and an explanation of the curriculum planning process culminates in the construction of a theoretical model.

Models can serve different purposes, and they may assume various forms: objects, pictures, verbal descriptions, and abstractions. They may refer to single events or a complex of relationships, to physical objects, to laws, or to a purely theoretical phenomenon - a model of concepts or an entire philosophical system (Belth, 1965). There are also various types and classifications of models. Chapanis (1961) categorizes models as replica models and symbolic models. Beach (1966) refers to scale, analogue, mathematical, and theoretical models

(p. 219-243). Caws (1974) identifies operational models, representational models, and explanatory models (pp. 1-10).

A theoretical model is generated through the process of thinking about a particular empirical phenomenon (Beach, 1957). According to de Groot (1969), the closed set of findings that the model explains may be qualitative or quantitative research outcomes, documents, research literature, or direct observations (p. 309). Caws (1974) and Lutz (1975) equate the theoretical model with an abstract conceptual structure. It is not unsupported speculation, but a representation of conceptual meaning that is grounded in sound, phenomenal, descriptive data, and developed through a rigorous analysis of the data base (Common, 1978, p. 36).

In themselves, models are not theory. Mouly (1978) refers to models as tools designed to help visualize complex phenomena. According to Travers (1970), they may be used in the preliminary stage of theory building. They aid theory building by suggesting questions that need to be asked and by providing clues to possible answers (Zais, 1976). De Groot (1969) says that a model defines what is needed by way of objects, relations, and valid operations to enable deductions to be made (p.

40). Models may also be used for thinking about curriculum, for guiding research, and for guiding curriculum planning (Zais, 1976).

The model developed in this study is a theoretical, or explanatory model. It contributes to knowledge of the curriculum planning process primarily through the reexamination of major questions and the manipulation of an extensive sample of data sources. Kaplan (1964) refers to this type of knowledge development as intention - making the explanation of a phenomenon more adequate.

Summary

In this chapter, the methodology of interpretative-theoretical research was described and the four phases of this method of investigation were delineated: exploration, description, classification, and explanation. The procedures used in framing research questions, establishing operational definitions, selecting data sources and sampling techniques, and establishing criteria for assessing the adequacy of categories developed in building the theoretical model were described.

In the chapter that follows, the results of the exploration phase of the research are described.

CHAPTER III: EXPLORATION

Introduction

In the previous chapter, the methodology of this study was described as interpretative-theoretical. The four phases required for theoretical model building were identified: exploration, description, classification, and explanation. In this chapter, the results of the first phase, exploration, are presented. Answers provided by the major data sources to the following research questions are described:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence curriculum planning?
5. How does curriculum planning occur?

The major data sources of this study were identified in chapter II. In this chapter, the intent is to provide a general description of the phenomenon of curriculum planning as it is treated by each of the major sources and to develop an extensive data base from which a classification scheme can be created. Analysis of the data is not the objective of this phase of the study; it occurs

in Phase Two.

The information gathered from each of the data sources is presented in two formats: (a) a written summary of the answers to the research questions which includes a brief comparison with previous data sources; and (b) a point-form display of the information in a table. The presentation of information begins with Tyler (1949) and ends with Tanner and Tanner (1981). Data sources are ordered according to criteria described in chapter II.

Tyler, 1949

The Tyler rationale is described by the author as "one way of viewing, analyzing and interpreting the curriculum and instructional program of a school" (p. 1). It consists of four fundamental questions:

1. What educational purposes should the school seek to attain?

2. What educational experiences can be provided that are likely to attain these purposes?

3. How can these educational experiences be efficiently organized?

4. How can we determine whether these purposes are being attained?

According to Tyler, "all aspects of the educational program are really means to accomplish basic educational purposes" (p. 3). The words purpose and objectives appear to be used synonymously to refer to the goals or ends desired by the school staff (p. 3). Their selection is a matter of value judgement, informed by investigation of three sources: the learners themselves - their needs, interests, and abilities; the contemporary life outside the school; the suggestions of subject specialists (pp. 3-21). Techniques employed in conducting the invest-

igation of sources include observation, interviews, tests, and questionnaires. The large, heterogeneous collection of potential objectives that results from the investigation is culled by applying two screens: the educational philosophy to which the school is committed and the psychology of learning. The most useful objective, in Tyler's opinion, is one that identifies the kind of behavior desired and the area of life in which that behavior is to occur (pp. 28-30). The term behavior is used in a broad sense; it includes thinking and feeling as well as overt action (p. 4). Clear, concise, behavior-specific objectives are essential because objectives become selection criteria for content, teaching procedures, and learning activities (p. 40).

According to Tyler, objectives are attained through the learner's educational experiences (p. 41). The term learning experience refers to the interaction between the learner and his or her environment. Learning takes place through the active behavior of the learner. It is through what the learner does that she or he learns (p. 41). Tyler contends that a learning experience is ultimately personal. The teacher's responsibility is to select experiences and to structure and manipulate the learning situation to facilitate the desired experience.

Principles of selection include opportunity to practice the behavior required by the objective, student satisfaction, appropriateness to student abilities and background, and variety (pp. 41-53).

The third phase of the Tyler rationale is the organization of learning experiences to produce a cumulative effect (p. 54). Organization is both vertical and horizontal. The elements to be organized are concepts, values, and skills. The organizing criteria are continuity (vertical reiteration) - recurring opportunities to learn various concepts, values, and skills; sequence - the progressive development of concepts, each successive learning experience being built upon the preceding; and integration (horizontal relationships) - the development of a unified view of experiences (p. 55).

Organizational bases include chronology, increasing breadth of application, increasing range of activities, description followed by analysis, and an increasingly unified world picture. The bases for organizing curriculum differ according to the project (p. 64). The final consideration in organizing experiences is the overall structure of the curriculum, whether organized into specific subjects, core and electives, broad fields, or into an undifferentiated structure (pp. 63-65).

The fourth phase in the Tyler rationale is evaluation of the curriculum. As a result of evaluation, it is possible to determine which aspects of the curriculum are effective and which need improvement. The major focus of evaluation for Tyler is the assessment of changes in student behavior in relation to stated objectives. To assess behavioral change, more than one evaluation point is required. Tyler recommends at least three: one in the early part of the program, another at a later point to measure immediate change, and a third sometime after instruction is completed, to determine the relevance of the change. He recommends the use of various techniques, such as observing, interviewing, and sampling, for gathering evidence, and the use of analytic summary to determine strengths and weaknesses (pp. 68-81).

With respect to the administration of the curriculum construction process, Tyler advocates widespread faculty participation, at least to the extent that staff members gain an adequate understanding of curriculum ends and means (p. 82). He recommends organizational arrangements suitable for a small faculty and those suitable for larger schools. He believes that learning experiences for particular courses should normally be planned by

those who teach them (p. 82).

A summary of the information gathered from Tyler (1949) is presented in Table 2.

Table 2

Summary of Information Relative to Research Questions from Tyler (1949)

Questions	Tyler (1949)
1. What is the purpose of curriculum planning?	To organize a program of educational objectives and experiences for students in a school.
2. What are the elements of curriculum planning?	purposes (concepts, values, and skills) experiences organization evaluation
3. Who are the curriculum planners?	school faculty
4. What are the contextual factors that influence curriculum planning?	learners' needs, interests, abilities contemporary life outside school subject specialists educational philosophy of the school psychology of learning
5. How does curriculum planning occur?	Investigate the sources of objectives: . learners . society . subject specialists Screen objectives: . through educational philosophy . through psychology of learning State objectives, indicating behavior and context Select learning experiences according to explicit criteria Organize learning experiences: vertically and horizontally (integration) Choose overall structure of the curriculum Evaluate and revise

Taba, 1962

Taba defines curriculum as "a plan for learning" (p. 11). It consists of four macroscopic elements: aims and objectives, content, learning experiences, and evaluation (p. 422). The purpose of developing curricula (i.e., plans for learning) is to help prepare young people for productive participation in the culture (p. 10). Planning takes places within the context of the educational philosophy and general aims of the school. Educational philosophy and general aims are formulated through an exploration of the major curriculum sources: society and culture, the nature of the learner and learning process, the nature of knowledge, and societal perceptions of the role of the school (pp. 1-14).

Taba's proposed five-phase inductive curriculum development strategy involves the experimental production of teaching-learning units, the testing of these units, revision and consolidation of the units, development of the overall curriculum design, and the installation and dissemination of teaching-learning units (pp. 456-459). Unit production itself is an eight-step sequence: diagnosing needs, formulating objectives, selecting content, organizing content, selecting learning exper-

iences, organizing learning experiences, evaluating, and checking for balance and sequence (pp. 343-379).

This systematic approach is advocated in the interest of fundamental change, as opposed to minor improvements. The critical dimension of this process is changing people - their knowledge, attitudes, and expertise. Taba argues that training for curriculum development should be combined with the actual production process, focusing on human relations, deficiencies in theoretical insight, and practical development skills (pp. 460-465). She recommends the following: initiating change relevant to the concerns of teachers; deploying diverse work teams with heterogeneous competencies; maintaining and enhancing the climate of group work; using volunteers in a program of extended participation at successive levels of work; providing for ongoing communication between developers and teachers; having a variety of leaders for the curriculum project, all of them expert in curriculum development and group processes (pp. 446-491).

Objectives of various levels of generality function as guides to learning and the selection of content and experiences. They "describe the kind of behavior expected and the context to which it applies" (p. 200).

Taba classifies objectives as follows: knowledge, reflective thinking, values and attitudes, sensitivities and feelings, and skills (pp. 211-230).

The criteria for content and experience selection include validity and significance, consistency with social and cultural realities, balance of breadth and depth, provision of a wide range of objectives, learnability and adaptability to student experiences, and appropriateness (pp. 263-289). Organizational considerations are sequence, cumulative learning, integration, focus, and variety in modes of learning (pp. 290-309).

Taba's concept of evaluation relates to her definition of education as a process that seeks behavioral change (p. 312). Its functions include determining whether objectives have been met, assessing behavioral change, and validating the curriculum plan and the teaching-learning methodologies used. Consistency with objectives, comprehensiveness, validity, and continuity, are some of the criteria applied by Taba to curriculum evaluation (pp. 316-323).

Teachers are involved in pilot unit production and the training of other teachers who participate in the testing of these units (p. 458). Curriculum supervisors, coordinators, and specialists have the primary respons-

ibility for assembling successful units into a curricular framework (pp. 458-459). Installation and dissemination are the responsibility of the administrative staff (p. 459). Students and lay people participate selectively, depending on the abilities required. Their contribution, like that of all the others, is strengthened through training (p. 456). Taba advocates cooperative curriculum development, involving heterogeneity of competencies - a true meshing of ideas, approaches, insights, and skills that generates creative planning (p. 491).

According to Taba, the following are the contextual forces that affect curriculum planning: current conceptions of the nature and needs of society and culture, the various expectations for the school, current conceptions of human development and learning, conceptions of the nature of knowledge, the quality of available curriculum leadership, the availability of a training program for participants, working conditions and group climate, the size and composition of committees, the adequacy of supporting research, and the quality of communication.

Tyler (1949) and Taba (1962) show considerable agreement with respect to purpose, elements, planners, and contextual influences. Differences exist, however, about how curriculum planning should occur.

Tyler describes a linear, deductive approach that begins with the study of curriculum sources. Taba's approach is an inductive one that starts with the production of curriculum units and proceeds upward to a broad curriculum framework. Taba also gives more attention than Tyler does to administration of the curriculum planning process by specifying roles for participants, identifying the different types of expertise required, arguing the need for on-the-job staff (planner) development, and by describing the desirable group work climate for planning and how it can be fostered.

A summary of the information gathered from Taba (1962) is presented in Table 3.

Table 3

Summary of Information Relative to Research Questions from Taba (1962)

Questions	Taba (1962)
1. What is the purpose of curriculum planning?	To develop a plan for learning -- a way of preparing young people to participate as productive members of the culture.
2. What are the elements of curriculum planning?	aims and objectives content (selection and organization) learning experiences (selection and organization) evaluation
3. Who are the curriculum planners	teachers administrators curriculum specialists content specialists specialists in group dynamics and research specialists in child development and learning lay people students
4. What are the contextual factors that influence curriculum planning?	society's concept of the role of the school the demands of society and culture knowledge of learning and learners conceptions of the nature of knowledge curriculum development sequence, deductive or inductive training for curriculum development leadership roles and skills abilities of participants

(table continues)

Questions	Taba (1962)
	deployment of expertise differentiation of tasks group work climate size of working groups
5. How does curriculum occur?	Within the context of the general aims of the school, previously formulated on the basis of curriculum sources: role of school; nature of society and culture; learning process and learners; nature of knowledge. Inductive five-step sequence: 1. Produce pilot units. . Diagnose needs. . Formulate objectives. . Select content. . Organize content. . Select learning experiences. . Organize learning experiences. . Evaluate. . Check for balance and sequence. 2. Test pilot units. 3. Revise and consolidate pilot units. 4. Develop curriculum framework. 5. Install and disseminate curriculum. Combine curriculum development and training for curriculum development. Apply knowledge of psychological and human relations. . Start with the concerns of teachers.

(table continues)

Questions	Taba (1962)
	. Employ a developmental strategy of selective, heterogeneous participation. . Integrate many competencies into the work team. . Form working groups on the basis of job requirements. . Assign tasks to individuals and groups. . Rotate individual and group work. . Limit size of work group: 15 members. . Maintain climate for productive work: Develop collective focus; Conduct deliberations in a permissive atmosphere; Assure protection of individual viewpoints; Cultivate and distribute natural leadership ability; Keep group composition and manner of work flexible; Maintain clear channels of communication. . Deploy multiple leadership roles, with expertise in curriculum production and group processes. . Maintain continual communication between pilot groups and the rest of the staff.

Bloom, 1981

The theoretical assumptions that underlie Bloom's ideas on curriculum planning are as follows:

1. Many individual differences identified in school are artificial and accidental rather than biologically fixed (p. 132). With the implementation of curricular and instructional changes, Bloom argues that not only can most students learn most of what schools have to teach, but they can also become very similar in motivation, learning ability, and pace of learning (p. 135). To achieve this, students need an awareness of what is to be learned, an awareness of standards of acceptable performance, regular feedback and corrective help as needed, and time. As well, it is essential that teachers believe in the equal learning capabilities of students (pp. 131-143).

2. The orientation of schools must shift from that of predicting and sifting human talent to that of developing people to their fullest potential. Bloom argues that maximizing educational competence is in the interests of the individual and of society in general, given the academic and technical competence required by the workforce of highly developed societies, the contemp-

orary necessity for people to be able to continue to learn throughout their lives, and the belief that education is a profitable investment that rivals most capital investments in its payoff.

3. The purpose of education is to change learners, largely in predetermined ways, that complement the needs of society (p. 180). Educational planning, of which curriculum planning is a subfield, is viewed by Bloom as a type of social planning aimed at reducing the differences between the values and aspirations of the school and those of the society (p. 184).

4. A clear distinction should be made between curriculum and instruction. Curriculum comprises objectives, materials, and learning experiences, and their interrelationships. Instruction involves the implementation of teaching and learning activities in pursuit of curricular objectives (p. 122). In Bloom's view, the major contrast between curriculum and instruction is that making fundamental changes in curriculum is an enormously complex task that often takes a long time, whereas instructional changes can be made rather quickly, and show some immediate effects (pp. 179-180).

5. Provision should be made for systematic curricu-

lum revision over time; it should focus on the integration and sequence of learning experiences and adaptation to local conditions and circumstances. With respect to curriculum substance or "what is worth learning", Bloom advocates that more attention should be paid to the following: the use of higher mental processes, knowledge and skill in the arts, student social interaction, attitudes and skills that promote the love of learning, and the provision of peak learning experiences (pp. 143-150).

According to Bloom, the purpose of curriculum planning is to develop a plan for changing student behavior in desired directions (p. 180). The elements, or tasks, of the process are as follows: making decisions about changes that should result from the curriculum, expressed in the form of objectives; choosing learning experiences designed to bring about the changes specified in the objectives; choosing evaluation methods that adequately assess whether or not students change in desired ways and to expected degrees and that evaluate the effectiveness of the curriculum itself (pp. 177-191). Making decisions about sequence, integration, and local adaptation of objectives, experiences, and materials are related tasks (pp. 177-191).

According to Bloom, the curriculum planners are teachers, scholars, educational planners, citizens, various national groups, and a large number of specialist groups representing curriculum subjects and the educational sciences - sociology, psychology and educational psychology, economics, political science, philosophy, guidance, and educational measurement. This team of experts is brought together to advise curriculum planners and to assist in curriculum development as needed, under the administration of a centre for curricular development and educational research (pp. 182-190).

The contextual factors considered by Bloom to be potentially influential are subject matter change, social change, and new knowledge of the learning process (pp. 178-179).

With respect to subject matter change, Bloom notes the rapid growth of knowledge and the new conception of disciplines as modes of inquiry rather than as histories of what has been produced in the past (p. 178). As for social change and its impact on the aims and uses of education, Bloom observes that political and economic changes, change in social values and educational philosophy, and the changing interests and aspirations of people make new demands upon curriculum. The school is

now called upon to produce competent citizens and to foster understanding and appreciation of the basic values of the society (p. 178). New knowledge of the learning process affects decisions on placement, the sequencing of objectives and learning experiences, and people's expectations for learners and the conditions of learning (p. 187).

With respect to how curriculum planning should occur, Bloom advocates the establishment of a center for curriculum development and research. The center must deal with three issues:

1. What are the changes in students which should result from the curriculum; that is, what are the objectives of the curriculum?

2. What are the learning experiences which will bring about the changes specified in the objectives? What material, teacher, and student interactions are planned?

3. How effective are the learning experiences in bringing about the desired changes in students? What evaluative evidence can be collected to determine the effectiveness of the curriculum? (p. 180).

Objectives are stated in operational form with respect to the knowledge students will acquire and their

cognitive abilities, interests, attitudes, and other characteristics. Decisions on objectives involve the consideration of current forces affecting the disciplines, the society, the students, the educational philosophy and value system of society, and the theory and principles of learning. Exploration of these factors requires the involvement of a team of experts, whose special role is to advise. Efforts should be made to determine, through review of the literature, the views of expert groups in other countries on subjects that are international in scope.

The responsibilities of the curriculum center are as follows: to suggest and try out procedures for providing learning experiences; to develop syllabi and teacher's manuals; to create a pool of recommended learning experiences to be used by classroom teachers; to provide teacher inservice, to help teachers adapt learning experiences to local conditions and the needs and abilities of students; to try out new curriculum on students and teachers; to construct valid, reliable evaluation instruments and techniques to use in determining if learning experiences and instructional materials need to be improved.

Bloom (1981) summarizes the three stages of curricu-

lum development as follows:

1. Stage One involves a series of value decisions based on available theory, research, and expert opinion, expressed in terms of objectives and content for a particular curriculum.

2. Stage Two involves artistic and creative systems in which learning materials and instructional procedures are devised to set the conditions under which powerful learning experiences may be made available to students.

3. Stage Three is concerned with quality control and feedback, to ensure that curriculum plans are being effectively realized. (p. 191)

The curriculum center brings together the necessary resources for effective curriculum construction, implementation, and evaluation (p. 191).

Bloom's conception of curriculum planning is very similar to Tyler's deductive model, except for the locus of planning. Bloom advocates the establishment of a center for curriculum development; Tyler views curriculum planning as largely a school-based activity carried out by the faculty, assisted by other experts.

A summary of the information gathered from Bloom (1981) is provided in Table 4.

Table 4

Summary of Information Relative to Research Questions from Bloom (1981)

Questions	Bloom (1981)
1. What is the purpose of curriculum planning?	To develop a plan for changing student behavior in desired directions.
2. What are the elements of curriculum planning?	To decide on the changes which should result from the curriculum (expressed in the form of objectives). To decide on the learning experiences necessary for bringing about the changes specified in the objectives. To choose evaluation procedures that determine whether or not students change in desired ways and to expected degrees, and to determine the effectiveness of the curriculum. To decide on sequence, integration, and local adaptation pertaining to objectives, experiences, and materials.
3. Who are the curriculum planners?	teachers scholars educational planners citizens various national groups a great variety of specialists, representing the school subjects and sociology, psychology, economics, political science, philosophy, guidance, and educational measurement

(table continues)

Questions	Bloom (1981)
4. What are the contextual factors that influence curriculum planning?	changes in knowledge and subject matter social change (political, economic, and values) new knowledge of the learner and the learning process
5. How does curriculum planning occur?	Establish a center for curriculum development and research, with responsibility for developing the overall curriculum, including plans and instructional materials. Center mobilizes material and human resources (team of experts, lay citizens, etc.) and administers the planning process. Stage One, decision making about objectives: . consideration of contextual influences . statement of objectives for student behaviour (feeling, action, and thinking) in operational terms Stage Two, decision making about learning experiences: . Synthesis of material, teacher, and student interactions, to set the conditions under which learning experiences are made available to students Stage Three, decision making about evaluation procedures: . Assessment of student learning and curriculum effectiveness, . Experimental trial of the new curriculum with sample(s) of students and teachers.

(table continues)

Questions	Bloom (1981)
Related tasks:	
. Consideration of sequence, integration, and local adaptation throughout development. . Center suggests and tries procedures for learning experiences. . Center develops syllabi and teacher's manuals. . Center creates a pool of suggested learning experiences for classroom use. . Center constructs evaluation instruments. . Center plans and conducts the necessary teacher inservice education.	

Goodlad (1979)

Goodlad's conceptualization for guiding curriculum practice and inquiry reflects the perspective of schools as public institutions. Goodlad conceives of curriculum planning as a multilevel, multiprocess decision-making activity that occurs within a social-political milieu. He defines curriculum as "a set of intended learnings" (p. 12) and curriculum planning as "decisionmaking about curricular ends and means" (p. 14).

According to Goodlad, the immediate purpose of curriculum planning is to produce valid and justifiable intended learnings. Its ultimate purpose is to make learners' lives more meaningful and satisfying. The elements of curriculum planning are decisions of three types: substantial, social-political, and technical-professional (p. 35). Substantial decision-making pertains to goals, learning opportunities, organization, and evaluation and their subelements: objectives, organizing centers, scope, sequence, continuity, and evaluation (p. 354). The social-political elements are the human processes involved in decision-making. These processes take place within the various levels or domains of planning, between each level, and also between

planning levels and the people and institutions of the cultural milieu in which the process occurs. Goodlad refers to social-political processes as transactions (p. 357). The technical-professional elements of curriculum planning are specialized knowledge, skills, and logistics required to develop or improve curricula (pp. 17, 360).

Curriculum planners include various organizations and individuals - legislatures, school boards, school administrators, teachers, students, and parents and other lay citizens (pp. 9, 28, 34, 35, 345). Goodlad considers student experiences to be one of the most neglected curriculum planning data sources. He contends that greater student involvement in curriculum planning is needed, coupled with the study of student perceptions of school experience as input into the planning process (1979, p. 37).

Contextual factors that affect curriculum planning are the civil interests, or the needs of the polity and the economy; the classroom culture and its subcultures (e.g., morals and manners, prevailing beliefs and loyalties, widely enjoyed recreational activities; the planners' perceptions of the wants and needs of students; the sources of knowledge (conventionally recognized fields of knowledge and organized bodies of experience

and behaviour); the communities of inquiry (research and scholarship); and the professional interests of teachers and administrators (p. 351).

The planning process is viewed as continuous; it occurs within the cultural milieu of human interests, needs, and wants, and at several levels - personal/experiential, instructional, institutional, and societal. The formulation of aims is considered a societal responsibility; the development of general educational objectives and the selection of learning experiences is undertaken at the institutional level. At the instructional level, very precise behavioral objectives are developed and the organizing centers are chosen.

Within the domains (or levels), the reciprocal processes of logical derivation and evaluation are employed in the planning of aims, objectives, and learning opportunities. These processes are coupled with communication between the several domains and between the domains and the individuals and organizations of the surrounding milieu, in the form of substantive interpretations (translation) and social-political transactions or negotiations. Curriculum planners use data from various sources in making decisions, including prior decisions

made at other levels (domains) of authority, funded knowledge, and conventional wisdom (p. 26).

Goodlad says that although goal development is often the starting point of curriculum planning, it is not the only possible starting point. Planning can begin with the consideration of worthwhile knowledge and appropriate learning opportunities (p. 354); indeed, "[planning] could and does begin anywhere" (p. 27).

Goodlad also notes that the perceived hierarchical nature of the interdomain decision-making structure (i.e., legislation and policy at the societal level functions to guide and sometimes to prescribe decision making at other levels) is not as rigid as it appears. What often happens is that the restraints imposed by legislatures and other institutions of the societal level are muted because of conflict and negotiation. Interdomain relationships may more appropriately be described as interactive rather than linear (p. 52).

Goodlad also points out that his conceptualization suggests a much more rational and orderly process than exists in practice. For example, domain-to-domain transactions are not always between two adjacent domains. As well, the inclusion of a personal domain of curriculum decision-making reflects a prescriptive stance rather

than a description of what occurs in practice (p. 57).

According to Goodlad, the following are conducive to curriculum planning: the deliberate use of knowledge sources, including the curricula of ideas; the responsible representation of controlling agencies on the planning team(s); the provision, on a sustained basis, of sufficient time for planning; the consideration of how to implement the proposed curriculum; the existence of a willingness by planners to confront questions of value and purpose; the attention of planners to the instructional problems of teachers; the emphasis in planner recruitment on competence in curriculum development; the existence of a perception on the part of planners of the power to change things; and the presence of strong individual leadership within the planning group(s) (pp. 52, 146-149).

The linearity of Goodlad's conceptualization is similar to that of other data source models. His treatment of the interdependence of the planning process and the cultural milieu corresponds to that of Taba (1962). Goodlad, however, sketches the complexity of curriculum planning more adequately than Tyler, Taba, and Bloom, showing that it is not really a linear process, but an interactive, multidomain, multidecision, social-political

process, subject continuously to the influence of forces in the surrounding culture. He also places greater emphasis on the potential contribution of students as participants in the curriculum planning process than previous sources.

A summary of the information gathered from Goodlad (1979) is provided in Table 5.

Table 5

Summary of Information Relative to Research Questions from Goodlad (1979)

Questions	Goodlad (1979)
1. What is the purpose of curriculum planning?	To produce valid and justifiable intended learnings. To improve the knowledge, skills, and attitudes of learners and to help them live more meaningful and satisfying lives.
2. What are the elements of curriculum planning?	substantive decisions: . goals (and objectives) . learning opportunities and organizing centers . organization (scope, sequence, continuity, integration) . evaluation social-political decisions technical-professional decisions
3. Who are the curriculum planners?	state legislatures school boards school staffs individual teachers individual students parents other lay people
4. What are the contextual factors that influence curriculum planning?	civil interests classroom culture client perceived needs and wants funded knowledge conventional wisdom prior decision of other levels of planning professional interests of teachers and administrators

(table continues)

Questions	Goodlad (1979)
5. How does curriculum planning occur?	formulation of aims (societal level) development of general objectives (Bloom type) institutional selection of illustrative level learning opportunities delineation of precise behavioral objectives (Mager type) instructional selection of organizing level centers processes: . logical derivation and evaluation of substance . interpretation from level to level . social-political transaction between levels and between the levels and the milieu starting point: anywhere conditions: . open participation . recourse to knowledge sources . responsible representation on committees . consideration of program implementation in the planning phase . confrontation of value and purpose questions . attention to live instructional problems of teachers . competent curriculum developers . perception of the power to change things on the part of participants . strong individual leadership in planning groups

Eisner, 1985

Eisner's conception of curriculum planning rests on the definition of curriculum as "a series of planned events that are intended to have educational consequences for one or more students" (p. 45). In other words, "a curriculum is a program that is intentionally designed to engage students in activities or events that will have educational benefits for them" (p. 46).

According to Eisner, curriculum planning spans a range of decision making, extending from the molecular to the molar - from decisions made by teachers on class projects to comprehensive policy making affecting the educational system of an entire nation. It encompasses emergent decision making, or "planning in process", and planning for the future (pp. 41-45). Eisner considers purely mental curriculum plans to be useful as well as those expressed in physical materials (p. 46). He draws a distinction between intended curriculum and operational curriculum; the intended curriculum is a body of materials planned in advance of classroom use, and the operational curriculum is what actually occurs when the intended program is put into operation (p. 47).

Eisner compares long-term curriculum planning to the

creation of a score by a composer or the preparation of drawings by an architect. He says that the pianist, the builder, and the teacher function in a similar way in that their performance is executed within the constraints of a design (p. 48). When teachers use an emergent model of curriculum planning, however, their activity is closer to that of a painter or a poet. In emergent planning, decisions are made by considering options as they develop, by reading the situation and exploiting the adventitious, and by allowing intentions to grow out of action rather than requiring them to precede it (p. 48).

The purpose of curriculum planning for Eisner is to transform "images and aspirations about education into programs that will effectively realize the visions that initiated the process" (p. 128). The major elements of curriculum planning are goals and their priorities, content, learning opportunities, modes of presentation and response, and evaluation (pp. 136-155).

Educational intentions may be stated in the form of aims (general statements of values held for an educational program), goals (statements of intent midway in generality between aims and objectives), and objectives (specific statements of what students should be able to do after having experienced a curriculum or a portion of

one) (pp. 136-137). Choosing curricular goals requires the establishment of priorities. It involves negotiating a balance between the desirable and the possible (p. 128). Because goals seldom prescribe the content necessary for their achievement, curriculum planners require other criteria on which to base their selections of content. Criteria discussed by Eisner include the relation of content to aims and the relevance of the content to the learners.

According to Eisner, the transformation of goals and content into the kinds of learning opportunities that will have desired educational consequences is an important task, requiring the art of educational imagination (p. 14). It is the planning task that draws most heavily on the expertise of the teacher; she or he must create educationally appropriate means for acquiring significant learning, influencing student attitudes, and developing various skills. Eisner draws attention to the strong link between the educational orientation of planners and the choice of learning opportunities through an examination of differences between curricularists who emphasize the learning process and those who emphasize knowledge of the products, or conclusions of mature inquiry in specialized fields (p. 141). He recommends

the development of a matrix of intellectual processes to create a balanced collection of learning opportunities, but cautions against regarding such classification schemes or mental constructions as reality, less they constrain understanding (p. 143).

Eisner discusses the organization or sequencing of learning opportunities in terms of two images - the staircase and the spider web (pp. 143-146). The staircase model of curriculum design depicts learning as building on what came before and preparing for what is to come. The path is fixed and inevitably upward. Most of the work involves drill and practice, and students usually assume a passive role. The spider web model emphasizes heuristic projects and materials and activities whose use will lead to diverse outcomes. The activities invite engagement; the task of the teacher is to help students attain educational goals through engagement in such activities.

Eisner argues that neither model of curriculum organization is more educationally beneficial than the other. Their usefulness depends on the planners' view of education and the readiness of students to cope with different types of problems and tasks (p. 144). The solution to the problem of how to sequence learning

opportunities is not found in dogma, he says, but through the process of deliberation engaged in by curriculum planners (p. 146).

The modalities of learning and expressing what is learned is one of the least considered elements of planning, according to Eisner. He notes that the modes of presentation and response that students encounter are either verbal or written language. Yet, there are more ways in which to construct, store, and express knowledge than the written or the verbal. In reality, he says, there are significant aptitude differences among students with respect to the knowledge and performance systems they use best (p. 150). Therefore, he advocates the intentional exploitation by curriculum planners of the variety of modalities people use to conceptualize and experience the world and to express what they have learned (pp. 149-151).

Evaluation, for Eisner, pervades curriculum planning. Selecting aims, content, activities, sequence, and modalities of teaching and responding requires the consideration of options and alternatives (pp. 152-155). Major focuses of attention in the evaluation process are the teaching that is occurring, the student and his or her learning, and the curriculum itself (p. 193).

Eisner identifies five major functions of evaluation: to diagnose, to revise, to compare, to anticipate educational needs, and to determine if objectives have been achieved (pp. 192-198). The criteria of evaluation for curriculum content and learning experiences are as follows: educational significance, bias, developmental appropriateness, suitability to the background and interests of students, diversity of modes of presentation and response, quality of teaching, and outcomes. Eisner distinguishes between objectives and outcomes: objectives are intentions; outcomes include both intended and unintended learning (p. 205).

Eisner contends that anyone who undertakes the translation of educational images and aspirations into programs engages in curriculum planning (p. 128). Teachers are continually engaged in the process. They inevitably make a range of decisions about the selection, emphasis, and timing of curricular events. Their decisions influence the kind of opportunities for learning that students have. The teacher is the major determiner of what is taught in the classroom, no matter what the orientation of the curriculum (p. 129).

A second group, school districts, engages in curriculum planning through committees composed of

specialists, teachers, or lay representatives, or a combination of specialists, teachers, and lay people. The third major group identified by Eisner is the staff members of state departments of education. For them, curriculum development projects may take the form of the production of classroom materials, or, as is more typically the case, the development of curriculum guides and outlines for use by school districts. Statewide committees often include subject specialists and a variety of professional and lay people among their members. A fourth group are those working in university research and development. Eisner also notes the influence of the federal government (referring to the U.S.A.) on what schools teach (p. 135).

According to Eisner, contextual factors that influence curriculum planning include ideological commitments, contemporary social forces, the personal theoretical orientations of planners, the existing curricula, and emerging curricular ideas. He notes the dominant influence of scientific assumptions and aspirations on curriculum planning since the turn of the century (pp. 8-18). Eisner considers scientific methods limiting; he advocates the exploitation of the full range of human rationality and the use of various models of curriculum

inquiry. He also stresses the importance of normative commitments in curriculum planning. "Without values", he says, "neither education nor curriculum has a rudder" (p. 49).

Eisner considers the following to be the current salient social forces affecting the curriculum planning process: the decline in student enrolment and the concomitant decline in fiscal resources, which ultimately results in a narrow curriculum and poor teaching (p. 27); the contemporary faith in scientism, which emphasizes behavior and neglects what students believe, feel, and experience (p. 28); the unionization of teachers, which sometimes results in preoccupation with salaries (p. 29); the growth of educational consumerism, manifested in the public's demand for participation in educational policy formation and its insistence that teachers and administrators be held accountable for educational outcomes. Eisner suggests that the results are often as follows: legislation requiring the use of pseudoscientific means to appraise teaching and learning (p. 30); reliance on textbooks; the involvement of the courts in settling educational disputes (pp. 25-38).

Eisner discusses five curriculum orientations: development of cognitive processes, academic rationalism,

personal relevance, social adaptation, and social reconstruction (pp. 61-85). He contends that these orientations of curriculum planners and practitioners are not merely abstract philosophies that have little bearing on practice, but are permeated with values that shape practice. Each orientation has specific implications for goals and content, for what is included or excluded, for learning opportunities, and for the learning environment and educational climate (pp. 83-85). No orientation is superior to another; different contexts justify different orientations. Eisner notes that schools tend to be eclectic in their curriculum orientations.

The existing school curriculum and the diffusion of new curricular ideas are also contextual influences on the planning process. Eisner notes that all schools have three curricula: the explicit curriculum, the implicit curriculum, and the null curriculum. The explicit curriculum comprises publicly stated goals and courses, the implicit curriculum is the expectations and rules of the school as a cultural system, and the null curriculum refers to what schools neglect to teach. Curriculum planners should consider these three curricular manifestations as well as emerging curriculum theory (pp. 55-60; 87-107).

How curriculum planning occurs has already been described in general terms when the elements of curriculum were discussed. Further insight into the process is provided through Eisner's description of the Kittering Project, a two-year undertaking aimed at improving art education in elementary schools carried out at Stanford University (p. 155).

At first, a team of eight doctoral students, headed by the director (Eisner himself), made up the core group of project planners responsible for writing lessons and criticizing one another's work. Later, it was found necessary to invite four elementary teachers to participate, to avail of their knowledge and experience with respect to children and life in the classroom. After the group was formed, the first task was orientation to the work. This was accomplished in four staff meetings. The work was then divided into phases. Phase I was devoted to conceptualizing the format of lessons and instructional materials, writing and criticizing, designing visuals, initial field testing in the classrooms of the teacher-consultants, and revising. Phase II was devoted to the trial of the developed materials, dissemination of information on the use and effects of the materials developed, and the development of evaluation procedures.

The working procedures were as follows:

1. The core group did the writing and met several times each week, while the whole group met only once a month.

2. The core group was organized in pairs to produce the lessons and conceptualize the type of visual support needed for the materials.

3. Drafts were reviewed by the project director and the whole group, including the teacher consultants.

4. Drafts were tried in the classroom and revised if necessary.

5. The process involved deliberation and collective decision making. Arbitrary resolution of impasses by the director was a rare occurrence.

6. Tryout of developed materials was done by 20 teachers in two school districts.

7. One formal inservice session was held for the twenty teachers.

8. Dissemination of information about the project was done by means of journal articles, speeches at conferences, newspaper articles, video tape productions for in-service sessions, teacher involvement in similar projects, and so on.

Eisner summarizes several significant features of

the curriculum planning process as experienced by the team:

1. Beliefs about what is desirable from an educational point of view and beliefs about how learning can be fostered play an important part in giving direction to practical work. He refers to a platform of theoretical beliefs which, through deliberation, were shared and internalized among the team; they provided almost an unarticulated covenant, giving direction to the project. They took on the character of social habits, and a group culture was established (p. 168).

2. Sustained deliberation was essential for arriving at a decision that was comfortable for the team members (p. 168). Deliberation involved the anticipation of likely effects of alternative courses of action, an examination of the problem from various perspectives, and the weighing of the evidence, often comparing incomparables (p. 120).

3. With respect to the commonplace elements of curriculum, subject matter was given more attention than student needs in group deliberation and planning. The nature and needs of society were hardly ever mentioned (p. 170).

4. Curriculum development is largely a group enter-

prise (p. 168).

In comparison with previous data sources, Eisner's peculiar contribution pertains to the role and scope of his conceptualization, and his inclusion of "modes of teaching and learning" as an element of planning. His conceptualization encompasses both molar and molecular planning projects, as well as emergent and long-term planning. It also includes inductive and deductive planning as discussed by Tyler and Taba, and curriculum planning for heuristic learning leading to diverse, unknown outcomes as well as for learning that is pre-specified and guided by precise behavioral objectives.

Eisner, unlike previous data sources, emphasizes the need to plan curriculum that develops a wide range of teaching and learning modalities. He also emphasizes aspects of curriculum planning already discussed by data sources reviewed: the role of ideology and belief (Bloom) and the importance of social-political transaction and sustained deliberation (Goodlad; Taba).

A summary of the information gathered from Eisner (1985), is given in Table 6.

Table 6

Summary of Information Relative to Research Questions from Eisner (1985)

Questions	Eisner (1985)
1. What is the purpose of curriculum planning?	To transform educational images and aspirations into effective educational programs
2. What are the elements of curriculum planning?	goals and their priorities content learning opportunities modes of presentation and response evaluation
3. Who are the curriculum planners?	teachers school districts state departments of education university research and development centers educational laboratories subject specialists lay representatives commercial publishers
4. What are the contextual factors that influence curriculum planning?	ideological assumptions and aspirations definition of curriculum normative theory of curriculum descriptive theory of curriculum Contemporary social forces: . decline in student enrolment . faith in scientism applied to education . unionization of teachers . educational consumerism

(table continues)

Questions	Eisner (1985)
5. How does curriculum planning occur?	. influence of textbooks . legislation and court decisions Five curriculum orientations: . development of cognitive processes . academic rationalism . personal relevance . social adaptation . social reconstruction . curriculum as technology Three curricula that all schools teach: . explicit . implicit . null diffusion of curricular ideas and materials Statement of intentions: . aims . goals . objectives (behavioral, problem-solving, expressive) Selection of content . suitability to aims . meaningfulness transformation of goals and content into learning opportunities organization of learning opportunities selection of presentation and response modalities evaluation of curriculum, teaching, and learning: . educational significance . bias

(table continues)

Questions	Elsner (1985)
	. developmental appropriateness . suitability to students' background and interests . diversity of modes of presentation and response . quality of teaching . outcomes achieved selection of development team choice of leader orientation of leader conceptualizing the work writing and critiquing hothouse trials extensive field testing sustained deliberation collective decision-making sharing of beliefs dissemination of information about the project at various stages and by diverse means inservice for teachers who will use the materials

Smith, Stanley, and Shores (1957)

Smith, Stanley, and Shores (1957) analyze the fundamental principles and procedures of curriculum planning. They conceive of education as a process of "shaping ... character, including attitudes, habits and beliefs" (p. 527). They view curriculum as educational means, "a sequence of potential experiences ... set up in the school for the purpose of disciplining children and youth in group ways of thinking and acting" (p. 3).

Assumptions underlying their treatment of curriculum include the following:

1. There is a universal connection between the school curriculum and the culture of any society. The curriculum reflects what people think, feel, believe, and do (pp. 3-8).

2. Curriculum change is a form of social change affecting relations, expectations, sentiments, and practices. It can be made only by upsetting the existing social equilibrium and establishing a new equilibrium at another level of educational practice (pp. 425-450).

3. The dynamism of curriculum change resides in the local school-community situation and is focused in local professional leadership (p. 458).

4. Leadership is a functional role of a group member or members, not particular abilities or traits. Leadership is being exercised when a member(s) helps the group define and meet its needs (pp. 459-460).

5. The source of moral authority in curriculum building is the democratic tradition, regarded as a growing, developing ideal rather than a fixed and final dogma (pp. 529-562).

6. The ends of education are essentially social ends; to the extent that society is democratic throughout, opposition between the social purposes of education and the needs and interests of children will be reduced to a minimum (pp. 634-635).

7. The basic social purpose of education cannot be comprehended simply as the perpetuation of the status quo. The purpose must include, as its central focus, that continuous reconstruction of ideas and institutions required to make a society a more perfect embodiment of the democratic way of life under conditions prescribed by historical imperatives (p. 635).

8. The core of the curriculum of the public schools should consist of a careful study of the significant social problems confronting the people; the curriculum should be ordered and arranged with due regard for the

abilities, interests, and needs of children and managed in such a way as will best develop the capacity of the learner to think, judge, and act intelligently (p. 635).

According to Smith et al., the purposes of curriculum development are to modify or change the school's educational program to keep it up to date and to bring it into line with existing social and psychological realities (pp. 2, 105, 477), to try to achieve a set of consistent ideas and values in which all members of the society can share (pp. 21-22), and to shape the educational program in such a way as to influence the form and direction of social development (p. 2).

Elements of curriculum planning identified by Smith et al. are the validation of educational objectives, the selection of subject matter, the sequencing of subject matter and grade placement, the allotment and distribution of instructional time, and the alteration of the existing curriculum.

The following criteria are used to select objectives: social adequacy, relevance to basic human needs, consistency with democratic ideals, logical consistency, amenability to behavioristic interpretation and statement (pp. 107-125). The selection of subject matter involves the application of standards of signif-

icance, survival, usefulness, interest to learners, and contribution to democratic society (pp. 126-151). Judgmental, experimental, analytical, and consensual procedures are used by curriculum planners to select objectives (pp. 152-168).

Smith et al. (1957) cite two competing principles of sequencing: "Accept the child as he is and adjust the experience to his level of development while holding the instructional objectives constant"; "Assume curriculum experiences to be located at a given level and provide learning to adjust the child to these experiences - get him ready for the learning" (p. 171). No matter which principle is applied, learner maturation, experiential background, mental age and interests, and the usefulness of subject matter and its level of difficulty must be considered. Suggested sequencing procedures are judgmental and experimental (pp. 169-195). The procedures suggested for determining curriculum emphasis and the allocation of time to each part of the instructional program include an examination of current practice, program purposes, and research findings (pp. 196-224).

The process of curriculum change is labeled engineering (p. 426), a systematic method employing the principles and techniques of social change. A formal descrip-

tion of this four-phase process and its functional representation, called action-research, is described in detail when how curriculum planning occurs is discussed.

Smith et al.'s view of who should participate in curriculum planning is in keeping with their social engineering perspective on curriculum change. They advocate community participation and the provision of leadership by the teaching profession. They regard the principle that "those affected by a policy or program should share, to the extent possible, in the development of that policy" as both democratic and respectful of human dignity (p. 452). They therefore stress cooperative school-community participation, and are careful to specify the need for the direct involvement of lay members, teachers, students, and educational consultants (pp. 425-499).

According to Smith et al., the contextual factors affecting curriculum development are as follows: the broad social and psychological realities operating in the culture at the time, such as value shifts, lifestyle changes, and employment opportunities (pp. 24-88); the positions of planners on such fundamental theoretical issues as the source of curriculum authority and the social role of education (pp. 529-650); the expectations

of the community (pp. 477-497); the organization and culture of the school, which affects teacher attitudes toward change and their willingness to cooperate (p. 439); the quality of curriculum planning, particularly with respect to the control of the forces for and against change (p. 443); the organization and function of the people involved (pp. 458-462); the quality of curriculum leadership provided by the local teachers (pp. 458-463); the pace of curriculum change (pp. 499-500).

Curriculum planning is described as a systematic, four-phase engineering process consisting of the following: a diagnostic study of the school-community situation to determine the forces which maintain the present curriculum; the introduction of change, to loosen up established forces; the controlling of the various forces in order to move curriculum practice in the desired direction, to the desired degree; the establishment of new forces to sustain the new curriculum (p. 444).

Diagnosis involves obtaining the opinions of parents, community leaders, educators, and so on, to establish the field of forces and the points at which changes can be made (p. 479). It also serves to clarify perceptions of the problem (p. 479). Because of the

tendency of change to disturb personal relations and feelings of security, Smith et al. advocate continuous diagnosis as curriculum development proceeds. "It is folly," they say, "to proceed without knowing what is happening" (p. 497).

The induction and control of change is effected by an analysis of social forces and the selection of starting points, involvement techniques, and control of the pace of change (p. 499). Smith et al. identify forces and classify them as either driving or restraining. They recommend that driving forces be strengthened and resisting forces weakened. Important forces, such as teacher and parent insecurities, should be dealt with early in the process. If teacher morale is low, they advocate delaying comprehensive curriculum development until "sore spots" are dealt with (p. 503). The best answer to the inevitable problem of disparate perceptions and the accompanying complacency is an attempt to modify perception, so that everyone involved shares a common perspective on the existing situation and the need for change. Suggested techniques for bringing different views together include surveys, interviews, and workshops. No specific suggestions on the pacing of curriculum change are offered, except that it should be slow

enough to allow meaningful participation and fast enough to maintain momentum (p. 500).

With respect to organization and leadership, Smith et al. recommend the following:

1. An advisory council to advise the school faculty and administration on matters of educational and social policy (p. 463).

2. The organization of personnel hierarchically and horizontally to facilitate communication and collaboration (p. 464).

3. A committee on communications, to facilitate exchange of information and perspectives, in the interest of common perceptions on the part of those involved (pp. 468-469).

4. Community participation.

5. Leadership by the local teaching profession in four spheres of expertise: the art of teaching, disciplines, values and educational engineering.

6. Faculty involvement facilitated by the administration through provisions of release time and minimal restraint on points of view, values, ideas, and information (p. 465).

7. The use of educational consultants as resource people, as opposed to change agents. Their essential

function is to supply, through on-the-job training of personnel, the knowledge and skills required for curriculum development (pp. 469-474).

8. The recognition of the local school-community situation, under the leadership of local teachers, as the dynamic factor in curriculum development.

9. The conception of leadership not as a set of inherent qualities or traits, but as the functional role of a group member in defining and meeting a group's needs (p. 458).

In practice, this formal curriculum engineering method is a form of action-research, aimed at the immediate modification of practice (p. 445). Whether the project under development is an isolated problem or comprehensive curriculum revision, the action-research cycle of activities - planning, action, and fact-finding about the results of the action - is employed (p. 447). In the case of a master plan of curriculum revision, the action-research cycle is used as often as necessary in every phase (p. 446).

A comparison of Smith et al. with previous data sources reveals considerable agreement about process elements, participants, influences, and leadership and organization requirements. Their special contribution

relates to the purpose and process of curricular change.

According to Smith et al., the purpose of curriculum planning must be deliberately ideological, oriented toward influencing, through the curriculum, the direction of democratic society. Smith et al. view the process of curriculum planning as a form of social change; it requires a systematic social engineering process of diagnosing, inducing, and controlling change and creating a new social environment to sustain the new curriculum. They also include the allotment and distribution of instructional time as an element of curriculum planning - an element not mentioned by previous data sources.

A summary of information gathered from Smith, Stanley and Shores, 1957, is presented in Table 7.

Table 7

Summary of Information Relative to Research Questions from Smith et al. (1957)

Questions	Smith et al. (1957)
1. What is the purpose of curriculum planning?	To keep the program up to date and in line with present social and psychological realities. To try to achieve a set of consistent ideas and values which all members of the society can share. To influence, through the curriculum, the form and direction of social development. To select and sequence potential learning experiences for disciplining children and youth in group ways of thinking and acting.
2. What are the elements of curriculum planning?	validation of educational objectives selection of subject matter sequencing of subject matter and grade placement the allotment and distribution of instructional time alteration of the existing curriculum (engineering)
3. Who are the curriculum planners?	lay members of the community teachers students curriculum consultants
4. What are the contextual factors that influence curriculum planning?	the broad social and psychological realities operating in the culture prior decisions of curriculum developers on certain fundamental curricular issues: the

(table continues)

Questions	Smith et al. (1957)
5. How does curriculum planning occur?	source of authority in curriculum building; the nature and source of educational objectives; the social function of education -- christian citizenship? rational development? preservation of social order? social reconstruction?; content selection criteria -- subjects? "great books?" child's interests and needs? great research disciplines? analysis of social practice? universal institutions? social trends or significant social problems? community expectations -- social forces affecting the curriculum the social organization of the school the quality of curriculum planning, particularly with regard to ascertaining and controlling of the forces for and against change the organization and function of personnel the quality of curriculum leadership by the local profession the pace of change It is a systematic, four-phase process: 1. A diagnostic study of the school-community situation is made to determine the forces that maintain the existing curriculum. Diagnostic techniques include parent questionnaires, interviews with community leaders, and opinions of graduates.

(table continues)

Questions**Smith et al. (1957)**

2. Change is induced in the existing equilibrium to loosen the constellation of forces.

Induction techniques include the analysis of of forces and selection of starting points using an "equilibrium diagram".

3. The various forces are controlled in order to move from the existing level of practice to a desired level. Control techniques include: strengthening the driving forces while reducing the restraining forces and attending to crucial forces of insecurity. If morale is low, "sore spots" are dealt with before major change is attempted. An effort is made to build common perceptions of problems and solutions on the part of those involved
4. A new constellation of forces to sustain the new curriculum is established.

Principles governing the organization and leadership of personnel are as follows:

- . There should be a curriculum advisory council to the faculty and administration.
- . There should be both vertical and horizontal organization of personnel to facilitate communication and collaboration.
- . There should be a committee on communications, overseeing communication of both information and perspectives.

(table continues)

QuestionsSmith et al. (1957)

- . Participation in the curriculum process should process should involve the whole community.
- . The local profession should provide leadership in four areas: the art of teaching, disciplines, values, and social engineering.
- . There should be minimal restraint on the expression of points of view, ideas and information exchange.
- . Consultants should be used as resource people rather than as agents of change.
- . The local school-community situation should be the dynamic factor in curriculum change.
- . Leadership should be conceived of as a functional role of a group member, carried out when the goals and needs of the group are defined.

The practical rationalization of this formal systematic social engineering process is a form of action-research -- a cycle of planning, action, and evaluation that is repeated as often as necessary to achieve change.

Saylor, Alexander, and Lewis, 1981

Saylor et al. (1981) define education as "an orderly, deliberate and sustained effort to transmit or develop knowledge, concepts, skills, attitudes and habits" (p. 2). They view the school as an educational agency whose purpose is to develop self-directing, self-renewing, continuous learners.

Curriculum is defined as a plan for providing sets of learning opportunities for persons to be educated. The authors regard this definition as flexible enough to encompass different educational settings and different curriculum designs, and to allow for adaptation and creativity by teachers. They interpret the word plan as meaning "intention" rather than "blueprint"; therefore, the curriculum plan and the planning process encompass both curricular ends and means (p. 7).

Saylor et al. take the following theoretical positions on curriculum planning: curriculum planning requires making value choices (p. 8); learners should have a large role in the planning process; no curriculum planning procedure is universally desirable (p. 14). They also make distinctions between curriculum, instruction, teaching, and learning. Curriculum is defined as a

"plan for opportunities for learning" (p. 10); instruction is the engagement of learners in the planned opportunities (instruction does not require a teacher); teaching is a process whereby one person mediates and facilitates another's learning; learning is a change in the learner's behavior (p. 10).

According to Saylor et al., the central purposes of curriculum planning are to develop self-directing, self-renewing, continuous learners and to enable teachers to effect desired changes in student behavior (p. 24). This requires the preparation of a comprehensive plan that takes into account all learning opportunities that may satisfy the desired objectives and meet the needs of a particular student population (pp. 28-31).

The elements, or tasks, of the curriculum planning process are as follows: the establishment of goals and objectives, the selection of curriculum designs, the selection of instructional mode(s), and the evaluation of the curriculum.

In discussing who should participate in curriculum planning, Saylor et al. recognize the value of a wide spectrum of curriculum planners: learners, teachers, parents, the general public, and professional people (p. 49). They note that the type of planning activity

(policy making, generic development, or site-specific curriculum development) determines the degree and kind of input different groups of planners will have.

How curriculum planning occurs is discussed by Saylor et al. in terms of decisions made about goals and objectives, curriculum design, curriculum implementation, and curriculum evaluation. The starting point is consideration of the future function in society of students; this is the criterion used to select goals and objectives. Goals and objectives provide the basis for the selection of a curriculum design, instructional modes, and evaluation procedures. A more detailed description of the planning process follows.

Defining goals and objectives is a four-step process: stating the broad purposes of education (a community-wide effort); identifying goals, and domains (an institutional responsibility); listing sub-goals; and stating instructional objectives (the responsibility of the school and of individual teachers). Saylor et al. believe that everyone who is directly concerned with education should participate in the process of defining goals and objectives: the learners, teachers, members of the board of education, representatives of government authorities, and citizens, particularly the parents of

school children. The authors argue that every committee should include two types of nonprofessional planners, lay citizens and students (p. 166). The committee should also include people from academic and professional fields (p. 166).

Following the identification of goals and objectives, curriculum planners select or develop curriculum design(s); i.e., the framework, or pattern, of learning opportunities for a particular student population (p. 199). Designs differ in underlying assumptions and values, as well as in form. The authors describe five curriculum designs: subject matter/disciplines, specific competences/technology, human traits/processes, social functions/activities, and individual needs and interests/activities (p. 199).

Designing a curriculum plan consistent with major goals, domains, and objectives is a six-step process: consideration of basic factors relating to the major goal and domain, identification of subgoals of the domain, identification of types of learning opportunities, selection of appropriate curriculum designs, preparation of design specifications, and identification of the requirements for implementation (pp. 202-204).

Curriculum design(s) provide characteristic types of

education, and the authors suggest that no one design is adequate for the total curriculum plan of an educational institution with multiple goals. Saylor et al. provide guidelines for the selection of designs for particular curriculum goals, domains, and objectives (p. 252).

Design gives the curriculum plan a framework for organization, implementation, and evaluation. It constitutes an order, however flexible, for the organization of sets of learning opportunities. Thus, with goals established and domains tentatively organized around sets of goals, planners must identify the learning opportunities appropriate to the goals, domains, and populations, and anticipate them in detail by fitting opportunities and design principles together in a promising framework (p. 253).

Once a design is selected, an actual plan is produced, generally a written one. The authors suggest that a plan should include the following: a description of the learners; purposes and general goals, possibly organized by domains; types of learning experiences to be provided; the locale or site where planning takes place; general time and space allocations; assessment procedures; the roles of various participants. They also suggest testing the designs before widespread implement-

ation (pp. 253-254).

Instruction is viewed by Saylor et al. as the implementation of a curriculum plan. They contend that the curriculum plan should mesh with the pre-instructional planning of teachers. Various methods of instruction are recommended in the curriculum plan, and resources, media, and organization are suggested. This promotes flexibility and freedom for the teacher and the students. Saylor et al. make the following suggestions for improving the link between curriculum planning and instruction:

1. Curriculum planners should recognize present practice and the curriculum should be designed to improve that practice.

2. Curriculum planning requires making suggestions about teaching models, and it should consider the factors that influence teaching and learning: bureaucracy, leadership, the participation of the principals in the instructional program, expectations for teacher and student performance, and the teacher's behavior.

3. Curriculum planners should anticipate the use of one or more teaching models to support various curriculum designs; the selection of models should be made on the basis of goals and objectives, student motivation,

principles of learning, facilities, equipment, and available resources.

4. Curriculum planners should attend to the way individual differences are to be dealt with in instruction.

5. Curriculum planners should consider the "unstudied" curriculum, particularly when goals and sub-goals in the affective domain are being formulated (pp. 256-314).

With reference to curriculum evaluation, the authors advocate a comprehensive program of formative and summative evaluation of the entire educational program and its elements. Elements are as follows: goals, sub-goals, and objectives; the curriculum and its various segments (domains, designs for each domain, courses, other sets of learning opportunities, extrainstructional activities, services, informal relations, institutional climate, instruction, the evaluation program itself).

To develop a coherent evaluation program and to select appropriate procedures for evaluation, the type of designs and teaching models used, the purpose of evaluation, and the audience to be served must be considered. Curriculum evaluation models are available as follows: the behavioral objectives model, the decision-making

model, the goal-free model, the accreditation model, and the responsive model. The procedures suggested for evaluating the entire educational program are professional judgment, accreditation, surveys and studies, self-studies, behavioral science studies, citizen judgments, and outcome measures. Saylor et al. recommend using the following process for evaluating each of the separate elements of the curriculum: list and evaluate subgoals; determine antecedents, or context input; determine standards for judging outcomes; collect data on program outcomes; make a technical analysis of the program; make judgments based on all data collected, to test congruence between intended and actual outcomes. The ultimate test of a curriculum program is its implementation. Thus, evaluation of instruction is a type of summative evaluation of the curriculum plan.

Various models are used for evaluating instruction. Data on antecedents, transactions, outcomes, effects on teachers, and effects on the community are gathered. Judgments are rendered and the information is synthesized and reported to authorities, parents, and the general public. Finally, the evaluation plan itself is judged on the basis of a series of questions on evaluation (pp. 316-364).

Saylor et al. identify three major types of curriculum planning: curriculum policy making, generic curriculum development, and site-specific curriculum development. They also suggest three possible approaches: the structured committee approach, the inductive approach, and the problem-solving approach. An eclectic approach, combining two or three of these approaches, is also advocated, and guidelines are provided for making the choice.

The role(s) of participants vary, depending on the curriculum approach adopted. Three types of involvement by students are envisioned: sitting in on planning groups; supplying feedback data; advising planners about their personal curricula. Teachers plan the curriculum, implement the curriculum, and negotiate the curriculum through the collective bargaining process. Community members sit on advisory councils, are members of parent-teacher associations, and have various other responsibilities.

The authors note the importance of leadership in curriculum planning. They advocate the matching of leadership styles to the curriculum planning tasks. They discuss the specific skills and knowledge required of curriculum leaders with respect to subject disciplines,

the history and concepts of curriculum development, curriculum development processes, and human relations (pp. 52-113).

Saylor et al.'s conceptualization of curriculum planning, while more detailed than those of previous sources, is largely in the linear, systematic, deductive vein of Bloom (1981), Goodlad (1979), and Tyler (1949). Saylor et al.'s peculiar contributions to an understanding of the curriculum process are as follows: their emphasis on learner development (as self-directing, self-renewing, continuous learners) as a purpose of curriculum planning; their inclusion of design selection or development as an element of the process; their emphasis on the link between curriculum and instruction, necessitating a deliberate attempt to mesh instructional planning and curriculum planning.

A summary of the information gathered from Saylor, Alexander, and Lewis (1981) is provided in Table 8.

Table 8

Summary of Information Relative to Research Questions from Saylor, Alexander and Lewis (1981)

Questions	Saylor et al. (1981)
1. What is the purpose of curriculum planning?	To develop self-directing, self-renewing, continuous learners. To enable teachers to effect desired changes in student behavior.
2. What are the elements of curriculum planning?	goals and objectives design implementation evaluation
3. Who are the curriculum planners?	learners people with experience in curriculum planning: . teachers . resource specialists . curriculum directors and coordinators . counsellors . directors of personnel . administrators people from outside the school or center: . curriculum specialists . evaluation specialists . community educators . resource specialists . lay citizens

(table continues)

Questions	Saylor et al. (1981)
4. What are the contextual factors that influence curriculum planning?	data from three major sources: . nature of learners (general and specific) . society . accumulated knowledge external forces that control curriculum development: . legal requirements . research . professional knowledge other: . critics of education . professional educators and other interest groups
5. How does curriculum planning occur?	In four principal phases: 1. Major goals, domains, and objectives are set through basic data analysis in four steps: . State purposes of education. . Identify institutional goals and domains. . List curriculum subgoals. . State instructional objectives. 2. A curriculum plan or plans are designed and written, consistent with major goals, domains, and objectives, a six-step process: . Consider basic factors relating to major goals and domains. . Identify subgoals of the domain. . Identify possible types of learning opportunities. . Settle on appropriate curriculum designs.

(table continues)

Questions

Saylor et al. (1981)

- . Prepare tentative design specifications.
- . Identify requirements for implementation.
- 3. Curriculum implementation (instruction) is anticipated:
 - . Consider how to improve present practice.
 - . Suggest appropriate teaching models.
 - . Anticipate how to deal with individualization and the effects of the "unstudied curriculum".
- 4. Curriculum evaluation, both formative and summative, of the total educational program and also in terms of the following separated elements is planned:
 - . goals, sub-goals and objectives.
 - . the curriculum and various segments of it.
 - . instruction.
 - . the evaluation program.

Various evaluation models and a variety of procedures for evaluating the total program are suggested.

Suggested approaches are structured - committee, inductive, and problem-solving. An eclectic approach is advocated.

Roles advocated for various participants include the following:

Students sit in on planning groups and function as suppliers of feedback and reaction on curriculum.

(table continues)

Questions	Saylor et al. (1981)
	Teachers are involved in planning, implementing, and negotiating. Community participants are involved through advisory councils, committees, meetings, surveys, etc. Various leadership skills and styles are required for curriculum tasks. Leaders require a knowledge of the disciplines and expertise in curriculum development and human relations.

Bobbitt, 1924

Bobbitt (1924) outlines a process for planning a curriculum of general education extending from kindergarten to junior college. According to Bobbitt, the purpose of education is "to prepare men and women for the activities of every kind which make up, or ought to make up, well-rounded adult life" (p. 8). He views school curricula as the major means whereby that purpose is realized. Planning a curriculum involves the identification of objectives, activities, and experiences which serve the purpose of education.

Objectives are determined through activity analysis, which involves determining which activities ought to make up the lives of adults and which abilities and traits are required for the proper performance of these desirable adult activities. Bobbitt refers to these abilities and traits as objectives (p. 8). He states that these objectives should be in human terms, in definite terms, and in everyday language (pp. 32-43).

According to Bobbitt, the second major task in curriculum planning is to determine the activities and experiences necessary for achieving the objectives. This task consists of three steps: formulation of a composite

list of all kinds of desirable experiences, the selection of experiences appropriate to each level of schooling, and the laying out of detailed activities for the children of each age or grade. Variations of these activities must also be provided for the different ability levels in each grade (p. 81). The third step is the arrangement of activities and experiences into an integrated program of general education (pp. 63-279).

According to Bobbitt, "within a school system, those who are nearest the detailed labors are the ones who should take the initiative in planning the details of those labors" (p. 280). For example, chemistry teachers should plan the details of a chemistry course (p. 280). Bobbitt also believes that parents should be involved in curriculum planning, both at the policy level and at the school level, where decisions are made on specific activities and experiences (p. 280-291). He proposes a working organization in which teachers (in cooperation with parents and other groups) plan program details at the course and classroom level, principals plan curriculum at the school building level, and superintendents and support staff plan general curriculum policies throughout the school system (p. 286).

Bobbitt's conception of curriculum planning

corresponds to that of nearly all previous data sources. He advocates teacher involvement, in cooperation with parents, as do Saylor et al. He also calls attention to the needs of the learners and their influence on the process, as do Taba, Goodlad, and others.

Bobbitt's unique contribution is his view of the purpose of curriculum planning and the mode of discovering curricular objectives. The purpose is decidedly vocational in orientation, focusing as it does on the activities of adult men and women in society. The method of generating educational objectives, activity analysis, is not discussed by any previous data sources.

A summary of the information gathered from Bobbitt (1924) is presented in Table 9.

Table 9

Summary of Information Relative to Research Questions from Bobbitt (1924)

Questions	Bobbitt (1924)
1. What is the purpose of curriculum planning?	To organize a program of activities and experiences that prepare students for the activities of adult life.
2. What are the elements of curriculum planning?	analysis of adult activities objectives pupil activities and experiences
3. Who are the curriculum planners?	board of education (approves plans and policies) superintendent and professional staff (district plans and policies) principals (building level plans) teachers (details of courses and activities)
4. What are the contextual factors that influence curriculum planning?	division in the community on educational objectives existing conceptions of teaching and learning diverse student ability levels leadership of superintendent and professional staff leadership of principal teacher involvement parent involvement assistance of specialized groups
5. How does curriculum planning occur?	Objectives are identified, by analysing adult activities. Student activities and experiences for pursuing objectives are determined.

(table continues)

Questions	Bobbitt (1924)
	Objectives and student activities are organized into a program of general education. Teachers are organized to plan course details and classroom activities. Principals are organized to plan curriculum for several buildings. Superintendent and professional staff are organized to formulate general professional plans and policies. Deliberations of the top are passed down as suggestions. Deliberations of the bottom are passed up as suggestions Corrections are made, resulting in shared vision and goals throughout the organization

Doll, 1986

Doll (1986) defines curriculum as "the formal and informal content and process by which learners gain knowledge and understanding, develop skills, and alter attitudes, appreciations, and values, under the auspices of the school" (p. 8). The curriculum is not only what is planned and occurs in classrooms; it includes unplanned learnings that take place in the auditorium, gymnasium, cafeteria, hallways, and on the buses (p. 311).

According to Doll, curriculum improvement should focus on the formal and the informal, the planned and the unplanned, and the manifest curricula and the hidden curricula. Doll admits, however, that there are limits to planning, particularly in the area of the "hidden", or "unstudied" curriculum, which involves personal feelings and perceptions that cannot be dealt with directly (p. 8).

The principles underlying Doll's view of curriculum planning are as follows: curriculum improvement requires careful planning for change (pp. 265-305); people are important in creating change and improvement (p. 305); curriculum improvement translates into the improvement of

people (p. 311); the chief locus of curriculum improvement is the individual school (p. 345).

According to Doll, the purposes of curriculum planning are to improve the structures and the documents of the curriculum and to stimulate learning by everyone concerned - pupils, teachers, classroom aides, supervisors, administrators, and parents and other community members (p. 311).

The major elements of curriculum planning are the stating of aims and objectives, the development or selection of curriculum design(s), the planning of curriculum implementation, and the evaluation of the curriculum (p. 312). Doll breaks down the planning process into the following steps: preplanning, determining needs, stating or reviewing aims, stating program or project objectives, identifying methods of evaluation, choosing a design, selecting learning content, determining and organizing learning experiences, and evaluating programs and projects to determine the worth of the design (pp. 192-204).

Curriculum planners fall into two categories: those who operate within the school districts, such as teachers, teacher aids, pupils, administrators, supervisors, boards of education, and lay people; individuals

and organizations outside the school district, such as state agencies, legislatures, regional organizations, makers of educational materials, test-makers, authors, colleges and universities, the federal government, teachers' organizations, and foundations. Doll notes that the responsibility for curriculum planning has shifted from those within school districts to those outside of them (p. 391).

Contextual factors considered to be influential in curriculum planning include the following: the history of curriculum development, various schools of philosophy, knowledge of learners' growth and development, knowledge of the learning process, the influence of the immediate community and the society and culture at large, and knowledge of the nature and uses of subject matter (pp. 3-168). More specific influences include the needs of teachers, characteristics of the existing curriculum, local curriculum problems, the abilities of curriculum planners, and pressures outside and inside the planner's self (pp. 313-330).

The process of curriculum planning is described by Doll as a series of steps: surveying the scene, assessing needs, identifying and defining problems, making and evaluating proposals, preparing designs,

organizing the work force, supervising the planning process, using the products of planning, applying methods of evaluation, and anticipating the future (p. 342).

Surveying the scene requires focusing on the similarities and differences between schools, traditional values and practices, expectations, people, funds, organization, and so on (p. 342).

To assess needs and identify curricular problems, planners must consider the need for change, the needs and problems of pupils and teachers, and the needs and problems that arise as the process proceeds (p. 342). In effect, needs assessment is an evaluation of "where we are" that prepares planners for making decisions about what needs to be done. The kinds of data that often prove useful in needs assessment include data on students, social and cultural trends, how students learn, and subject matter - what students should learn (pp. 314-315). A wide range of diagnostic devices for collecting information is employed and various techniques are used to order them (p. 317).

Preparing designs is a step-by-step process of stating program or project objectives, identifying instruction methods, choosing a type of design, selecting learning content, determining and organizing learning

experiences, and evaluating the program or project summatively (p. 343). Doll stresses the importance of widespread involvement of the people concerned in the formulation of aims and objectives and the importance of stating objectives clearly and precisely. Appropriateness is a critical criteria in choosing evaluation means. Selection of learning content requires a balance of informal subject matter drawn from the world of affairs and life experiences and formal subject matter, chosen from the disciplines. Subject matter selection criteria include validity, appropriateness, durability, "learnability", and relatedness to other fields. Similar criteria are used to select and organize learning experiences. Evaluation should be made of the curriculum as a whole and of its separate elements, employing a variety of procedures and evaluation models.

Organizing the work force requires finding the best personnel to perform designated tasks and then organizing them so that their talents are used to best advantage (p. 343). Doll recommends a centrally coordinated approach that serves the district as well as the individual school. This involves the creation of a central steering committee, ad hoc committees with clearly defined purposes, and school level, grade level,

and departmental groups.

The organization of curriculum planners is done in accordance with specific guidelines; different people (superintendents, supervisors, and others) are assigned specific roles. Curriculum leadership requires a knowledge of human relations and group processes. Strategies for curriculum improvement include master planning, coordinated local planning, and inservice education.

Supervising the planning process involves the organization of a central steering committee responsible for making policy and arranging resources. Daily direction is provided by curriculum coordinators and school principals (p. 343).

Utilization of the products of planning, or putting the plans to intelligent use, is usually done by classroom teachers. The task of the supervisor is to help and encourage teachers as they do so (p. 343).

Applying evaluation refers to the formal evaluation of the project or program to answer the question "Does the project or program work?" (p. 219). A variety of instruments are used, in accordance with carefully prescribed purposes. Suggested principles and practices of evaluation are as follows: acknowledge the presence of values and valuing in evaluation; recognize the goal

orientation of evaluation; provide for comprehensive assessment, continuity, diagnostic worth, validity and reliability, integrate findings, and progress toward goals (pp. 225-227).

Anticipation of the future, based on feedback regarding the success of the plan, involves projecting revision schedules, as necessary (p. 344).

Doll's particular contribution to an understanding of the curriculum planning process pertains to his answers to the research questions regarding contextual influences and how planning occurs. He explores the potential impact of history on curriculum planning, and provides a detailed treatment of how to organize and manage the planning process, stressing leadership abilities and good communication.

A summary of the information gathered from Doll (1986) is presented in Table 10.

Table 10

Summary of Information Relative to Research Questions from Doll (1986)

Questions	Doll (1986)
1. What is the purpose of curriculum planning?	To improve the structure and the documents of the curriculum. To stimulate learning on the part of everyone concerned with the curriculum.
2. What are the elements of curriculum planning?	establishing aims or goals deciding on design(s): . preplanning (educational philosophy) . stating or reviewing aims . stating program or project objectives . identifying evaluation means . choosing a design . selecting learning content . determining and organizing learning experiences . evaluating the program or project planning for implementation evaluation
3. Who are the curriculum planners?	Category 1: Participants who operate within school districts: . teachers and teacher aides . pupils . administrators and supervisors . boards of education . lay persons Category 2: Persons and organizations outside school district:

(table continues)

Questions	Doll (1986)
	. state agencies . legislatures . regional organizations . makers of educational materials . test-makers . miscellaneous groups - authors - colleges and universities . federal government . teachers' organizations . foundations
4. What are the contextual factors that influence curriculum planning?	historical and philosophical foundations psychology: . learner's growth and development . differences in learners . understanding of the learning process social and cultural forces (influences): . within society at large . within the immediate community nature of the subject matter the characteristics of the school situation the needs of the pupils and teachers the curriculum problems in the local school or district the competencies of potential participants in planning curriculum external and internal influences on individual planners

(table continues)

Questions	Doll (1986)
5. How does curriculum planning occur?	trends and issues affecting curriculum Steps in curriculum planning: . surveying the scene . assessing the needs . identifying and defining problems . making and evaluating proposals . preparing designs . organizing the work force . supervising the planning process . using the products of planning . applying evaluation means . anticipating the future Organization: A centrally coordinated approach is taken to serve both the individual school and the whole school system. . School system level organization: - central steering committee(s) - system wide faculty organization(s) - lay advisory committees - central office supervisors - ad hoc committees . Common tasks of central steering committee: - surveying curriculum needs - getting action started - facilitating communication - approving work of subcommittees - identifying and assigning personnel

(table continues)

Questions	Doll (1986)
	- locating facilities and materials - coordinating activities - arranging and guiding evaluation - providing for public relations with people and organizations outside the school system
	. School level organization
	- grade level committees - department committees - school wide planning council - working (ad hoc) committees
	. Ad hoc committees
	- formed for specific purposes - attend to pressing concerns - membership based on competence and interest
	. Guidelines for organizing people and materials
	- Start small by involving only a few people. - Choose participants carefully, on the basis of interest and ability. - Hold planning sessions when needed. - Give credit to planners. - Provide planners with necessary time, resources and materials. - Fix responsibility for subparts of planning operation. - Establish time limits for completing portions of the work, but do not rush. - Help planners see what's important.

(table continues)

Questions	Doll (1986)
	- Have criteria for determining what is to be done. - Encourage participants to do the job well. . Suggested tasks for teachers: - Serving on grade level committees - Serving on departmental committees - Trying out and evaluating materials - Other tasks as needed . Suggested tasks for pupils: - answering questionnaires, participating in group discussions, interviews, etc. - act as subjects of studies - conducting surveys - serving on committees - working for committees - trying out tests and materials . Suggested tasks for superintendents: - lending active support - facilitating participation - aiding communication - encouraging efficient problem solving - establishing the organization - interpreting program revisions to school boards - seeking funds, personnel, and materials . Suggested tasks for supervisors and coordinators

(table continues)

Questions	Doll (1986)
	- generating new ideas - assisting with staff development - encouraging and troubleshooting - advising on curriculum trends
	. Suggested tasks for principals
	- recruiting able teachers - arranging work loads - providing teacher orientation - supporting program change - encouraging teacher evaluation - facilitating inservice
	. Suggested tasks for lay people
	- serving on citizen advisory committee - acting as resource people - lay cabinets to schools
	Communication guidelines
	. Keep communication unit small.
	. Keep messages brief, and pointed.
	. Allow ample time for communication.
	. Employ formal and informal channels of communication.
	. Have one person or group watch over communications.
	Leadership abilities
	. ability to establish good human relations
	. adherence to principles of human growth and development
	. knowledge of when, where, and under what conditions to change curriculum

(table continues)

Questions	Doll (1986)
	. ability to use group process techniques . ability to relate quickly to other people . ability to develop the creative abilities of other people . ability to plan and organize facilities and personnel . ability to solve educational problems
	Curriculum improvement strategies
	. master planning . coordinated local planning . inservice education and staff development . planned programs of supervision . experimentation and research

Macdonald and Purpel, 1987

Macdonald and Purpel propose a model of the curriculum planning process based on an adaptation and blending of aspects of participatory hermeneutics and experimental liturgy (p. 190).

The fundamental motivation for their proposal is a world-life view that embraces transcendent reality and a cluster of visions of humanity, the universe, human potential, and humanity's relation to the cosmos (p. 192). Education is seen as a sacred process that can lead to wholeness, unity, and healing. Its highest goal is liberation from unnecessary constraints on dignity and potential, and movement toward full consciousness, fulfillment, joy, and integration - in a word, freedom (p. 187).

Macdonald and Purpel's proposal is a reaction to the dominance of the technical paradigm of curriculum planning, epitomized for them by the Tyler rationale. They are interested in trying to forge powerful alternatives; to free the field from what they perceive as the narrowness, amorality, and alienation of the existing mechanistic and control-oriented processes that shape not only curriculum but so much of our culture (p. 192).

The most important feature of their model is the platform of assumptions and values, decidedly religious in nature, from which curriculum thinking proceeds. This contrasts dramatically with the dominant paradigm, which posits neutrality and objectivity. In their opinion, "curriculum planning is but an index, a reflection, an aspect, an activity that emerges from an orientation and vision of who and what we are, where we came from, and where we are going" (p. 192). This platform needs to be clearly and publicly stated.

The curriculum planning process occurs in three major phases: data gathering and analysis, participation, and interpretation. It proceeds from the platform by means of dialogue among the participants, culminating in recommendations and decisions. Decisions are taken by consensus, or as much consensus as possible.

Several purposes for curriculum planning are discussed: to plan an educational program of human liberation and related goals; to facilitate transcendence of the status quo both culturally and spiritually; to plan a moral educational program; to nourish democratic participation and communication; to provide a liberating experience for participants in curriculum planning; to facilitate inquiry, criticism, reevaluation, and problem-

solving.

The content elements of planning are the platform, data gathering and analysis, participant observation, and interpretation. Process elements are dialogue and decision by consensus, or as much consensus as possible.

Macdonald and Purpel employ religious metaphors in an attempt to go beyond technology, control, and alienation. They express the following beliefs: the world is part of a larger transcendent reality; the task of humans is to be in harmony with that reality; humans are intended to be participants in the development of a world of justice, love, dignity, freedom, joy, and community; the re-creation of ourselves and the world in unity with the divine is possible (p. 187). Their platform, or framework, calls for openness, experimentation, diversity, variety, and freedom (p. 191).

The authors suggest that particular curricular issues and content should determine exactly who the planners should be. They note, however, that representatives of those involved and affected by curricular change should participate as well as those having the required expertise and experience.

Various factors are cited as affecting the curriculum process: the developers' platform, the history of the

curriculum field, the particular historical and cultural context of the current planning process, the cultural and personal backgrounds of students, a myriad of barriers to personal and cultural fulfillment, and the model of planning employed.

Curriculum planning takes place in three phases: data gathering and analysis, participant observation, and interpretation. The first phase provides an historical and theoretical perspective on curriculum planning issues in relation to the platform. The second involves the planners directly in the issues and concerns; the third involves the sharing of individual meanings and interpretations, values, assumptions, backgrounds, orientations, and life-views. Out of a thorough and open sharing process, decisions and recommendations emerge. Considerable dialogue is a feature of all three phases; it is conducted in accordance with guidelines on form and substance. Decisions are by consensus, or as much consensus as possible.

Logistical concerns that planners must attend to include who to involve in the process, the size of the planning group, and the nature of member involvement.

Macdonald and Purpel's conceptualization exhibits certain features common to previously explored data

sources. For example, personal morality and nourishment of the democratic community as purposes for curriculum planning, are also advocated by Smith et al. (1957). Data gathering and analysis, which is viewed by Macdonald and Purpel as integral to the "how" of curriculum planning, is also discussed by all previous data sources. The role of a planners' values and beliefs in curriculum decision making is emphasized by Eisner (1973).

Nevertheless, Macdonald and Purpel's conception of curriculum planning is an alternative to the largely linear, technical paradigm described by previous data sources. They are the only data source that identifies human liberation and the development of transcendent understanding of spiritual and cultural reality as purposes of curriculum planning. Also unique is the planning process they advocate - a blending of participatory hermeneutics and experimental liturgy, involving decision making through dialogue and consensus.

Although dialogue is discussed as integral to curriculum planning by Goodlad and Taba, and is implied in the conceptualizations of other data sources also, the emphasis given it by Macdonald and Purpel, and their treatment of the form and substance of dialogue, does not

appear in previous data sources, with the exception of Taba.

A summary of the information gathered from Macdonald and Purpel (1987) is presented in Table 11.

Table 11

Summary of Information Relative to Research Questions from Macdonald and Purpel
(1987)

Questions	Macdonald and Purpel (1987)
1. What is the purpose of curriculum planning?	To plan an educational program of human liberation and related goals such as skill mastery, information, knowledge, and explanation. To embody the transcendent, in both its cultural and spiritual meanings. To plan curriculum for the moral enterprise of education -- a series of "shoulds", mastery of which will purportedly lead students to be "good" persons, to live "good" lives, and to make a "good" society. To nourish a democratic community. To provide an important educative opportunity for participants involved in the curriculum process. To conduct inquiry, criticism, reexamination, research, and reevaluation of the curriculum and to solve curriculum problems.
2. What are the elements of curriculum planning?	platform data gathering and analysis participant observation interpretation: . dialogue . consensus
3. Who are the curriculum planners?	determined within the context of each setting and in relation to the particular issue

(table continues)

Questions	Macdonald and Purpel (1987)
	representatives of those who are directly involved in and affected by the issue persons with required talent-expertise, experience, imagination and knowledge
4. What are the factors that influence curriculum planning?	Developer's platform: its historical, transcendental, metaphysical qualities and moral, ethical, political and aesthetic characteristics History of curriculum field Historical and cultural context of the planning process Student's personal and cultural background Barriers to personal and cultural fulfillment: injustice, war, disease, greed, violence, oppression, ignorance, fear, prejudice, alienation, inadequate information, insufficient understanding, differing interpretations, and the dilemmas, paradoxes, uncertainties and ambiguities of life and education Model of planning used
5. How does curriculum planning occur?	By means of a three-phase process that blends aspects of <u>participatory hermeneutics</u> and <u>experimental liturgy</u>, as follows: Phase 1: Data gathering and analysis. To gain historical and theoretical perspectives on the particular issue in relation to platform Phase 2: Participant observation. Curriculum planners become directly involved in the issue, either through ongoing programs or through pilot programs.

(table continues)

Questions**Macdonald and Purpel (1987)**

Phase 3: Interpretation.

Curriculum planners share meanings each has derived from the process and their own biographies. Out of a thorough and open sharing process decisions and recommendations emerge.

decision processes:

- . dialogue (a feature of all three phases)
- . consensus (or as much consensus as possible)

Dialogue criteria:

- . form
 - need to reflect values of platform
 - personally nonjudgmental
 - celebration of diversity
 - sensitivity to personal dignity
 - intellectually rigorous
 - aesthetic sensibility
 - free-flowing imagination
 - . substance
 - the abstract and concrete
 - the individual and the group
 - understanding and meaning
 - society and culture
 - ideals and actual
 - congruence between values of framework and the dialogue
 - . logistical concerns
 - size of group
 - extent of members' involvement
-

Schwab, 1970, 1971, 1973, 1983

Schwab (1970, 1971, 1973, 1983) develops a "practical" paradigm of curriculum inquiry. He describes curriculum planning as the process of "translating scholarly material into curriculum" (1973, p. 365), and defines curriculum as follows:

what is successfully conveyed to differing degrees to different students by committed teachers using appropriate materials and actions, of legitimated bodies of knowledge, skill, taste, and propensity to act and react, which are chosen for instruction after serious reflection and communal decision by representatives of those involved in the teaching of a specified group of students who are known to the decision makers. (p. 240)

Schubert (1986) observes that Schwab's conception of curriculum is much broader than other familiar conceptions, such as "intended learning outcomes" or "subject matter to be delivered" (p. 301). Schwab's definition contains two fundamental perspectives: that curriculum

planning involves the continuous interaction of four common curricular elements - teachers, students, subject matter, and milieu; that curriculum decision making should take place at the school level and the classroom level.

Schwab's fundamental principles of curriculum planning are as follows: substantive institutional change should be incremental and in coherence with what remains unchanged, versus dismantling and replacing; action should be taken on diagnosed ills of the curriculum as opposed to change based only on new notions of people, society, learning, or knowledge; effective decision making requires the generation of alternative solutions to problems; the generation of alternative solutions and their application requires a diversity of abilities, perspectives, and expertise (1970, pp. 294-321).

Schwab calls deliberation the art of the practical; a process that is neither inductive nor deductive but is interactive (1970, p. 291). It is engaged in by a planning group whose members represent five different areas of expertise: students, teachers, subject matter, milieu, and curriculum making. Group members pool ingenuities, insights, and perceptions to determine the

ends and means of curriculum, conceived of as mutually determining one another (Schwab, 1983, p. 255).

Schwab argues that for too long there has been a mistaken overreliance on theoretical modes of inquiry in curriculum, methods that are generally not productive in solving curriculum problems. Theoretical inquiry is concerned with universal and pervasive phenomena. Its problems arise in the mind in relation to known disciplines of knowledge, its methods are standardized and controlled by principle, and the outcomes sought are theoretical constructs of universal, extensive, or pervasive applicability. The practical, on the other hand, is concerned with particular situations; its problems arise out of circumstances; its methods are flexible; the outcomes sought are decisions, or guides to action. Schwab believes that most of our curriculum energies should be diverted from theoretical pursuits into practical modes of inquiry (1970, pp. 287-299).

The overall purpose of practical curriculum planning is "sustained improvement of the schools" and avoidance of the "procession of ephemeral bandwagons" that characterize theoretical inquiry (1970, p. 321). Complementary purposes are the maintenance and improvement of the curriculum, in keeping with what remains useful, the

repair of friction and failures in the curriculum machine, and the overcoming of product deficiencies (1970, pp. 313-315).

The elements of curriculum planning are ends, means, effects, commonplaces, deliberation, and evaluation. Curricular ends are the purposes of education and their reasons. Curriculum means are the materials for student use, teacher guides, and patterns of teaching and learning (1973, p. 241). Schwab also talks about curricular effects, to draw attention to unintended learning, or the side-effects of the program (1973, p. 241). Schwab calls the learner, the teacher, subject matter, and milieu curricular commonplaces; they all have equal status unless it is decided otherwise. These commonplaces inevitably interact in the curriculum process, and therefore coordination by a chairperson (a curriculum specialist) is required (1973, p. 371).

Deliberation is the essential process element of practical curriculum planning, engaged in by spokespersons representative of the four commonplaces and of curriculum making. Deliberation is an interactive, collaborative process involving the consideration of curricular ends and means, problems, data, and solutions (1970, pp. 318-319). Consideration of relevant facts,

generation of alternative solutions, consideration of the consequences of each alternative, and selection of the best course of action are important aspects of deliberative planning (1970, p. 318). In the process, three operations take place: discovery of one another by collaborators, coalescence of what is discovered, and utilization of the coalesced knowledge to generate new educational materials and purposes (1973, p. 365).

Schwab advocates a formative evaluation procedure that is conducted concurrently with deliberation. Its purpose is to improve curricular materials before they are widely distributed. Evaluation is not only concerned with the efficacy of a curricular selection to serve stated intentions but also with clarification of intentions and their supporting values. The process engages the teacher and the evaluator in a sensitive watch for learner reaction, particularly for responses not anticipated in the stated intentions. Findings are reported to the planned group by means of demonstration classes as well as by the usual statistical reports, thereby providing for direct learner input into the planning process (1973, p. 375).

Curriculum planners, which Schwab refers to as agents of translation, represent five bodies of exper-

ience and expertise - learners, teachers, subject matter, milieux, and curriculum making (1973, pp. 365-368). One member of the planning group may represent more than one of the commonplaces and there may be more than one representative of a commonplace (1973, p. 370). The recommended composition of a standing curriculum committee for an individual school or small school system is four to six teachers, the school principal, a school board or community member, and one or two student representatives. Advisors to the committee may include subject specialists (professional academics) and various social scientists - psychologists, sociologists, and ethnographers, as required (1983, pp. 243-252).

Group planning is required because no one person adequately commands the particularities of all the curricular commonplaces (1983, p. 244). Teachers must be members of the planning team because of their knowledge of children and the art of teaching. Because ultimate control of "artistic" judgement and behavior rests with teachers, they must be actively involved in deliberation and decision making about what and how to teach. Schwab suggests the inclusion of teachers with several different abilities: curriculum problem solvers, implementors of change, and representatives of different subject areas

than the one under consideration (1983, p. 246). The principal's involvement is indispensable because of the need for his or her support and his or her knowledge of the school milieu (1983, p. 247). The school board or community member represents those who hire, work, and socialize with the graduates (or products) of the educational program (1983, p. 247). The various academic and social science advisors contribute needed expertise in the areas of curriculum content, modes of disciplinary inquiry, and up-to-date research (1983, pp. 249-251). The curriculum specialist functions as group chairperson, an essential role in deliberative planning (1983, p. 254).

Contextual factors considered influential in the deliberative curriculum process are as follows: the existing educational policy; theoretical knowledge in the social sciences; the accumulated lore of practical experiences; the results of assessments of curriculum ills and product deficiencies; the availability of fresh alternative solutions to curriculum problems; the size and composition of the planning group; the attitudes of members of the planning group toward scholarly materials; local social and cultural realities; the formative evaluation of curriculum materials conducted before they

are widely distributed. Educational policy often serves to guide deliberation, but policy itself is subject to change as a result of deliberation (1970, p. 291).

Theoretical knowledge in the social and behavioral sciences consists of numerous, largely unconnected theories and different modes of inquiry. Schwab doubts that one theory or science will ever encompass all of the others. Nevertheless, says Schwab, the various disciplines and theories affect one another, and "in practice, constitute one complex, organic agency affecting the curriculum process" (1970, pp. 307-308). He argues that a curriculum must be grounded not in one or a few sub-subjects of the social sciences, but in all of them (1970, p. 308).

Experience in teaching and curriculum planning contributes to accumulated practical knowledge and wisdom that is influential in current curriculum planning efforts. Schwab states that "it is this recourse to ... experience of actions and their consequences ... which constitutes the heart of the practical" (1970, p. 312).

The diagnosis of curricular ills and repair of identified frictions, failures, and deficiencies requires continuous and comprehensive assessment of the following: classroom action and reaction, student behavior both

during and beyond school, and employer and community perceptions of the products of the educational system. In diagnosis, attention is paid not only to intended learnings but also to the unintended learnings - the side effects of the educational process (1970, p. 314).

Noting that "the best choice among poor and shopworn alternatives [is] still ... a poor solution", Schwab argues the importance of the anticipatory generation of alternative solutions in practical curriculum planning (1970, p. 316). And, given that schools, as public institutions, are subject to new problems and changing circumstances as time progresses, Schwab contends that curriculum planning must be anticipatory and generative of new insights and alternative solutions.

A related consideration in the practical planning paradigm is the size and composition of the planning group. Given the variety of social science and academic disciplines that contribute to curriculum planning, it is necessary to involve representatives of a broad spectrum of interests, abilities, and perspectives. Schwab states that representatives of five bodies of experience and expertise must be involved in the planning process: curriculum making, subject matter, learners, milieux, and teachers. This group is supported by advisors from other

social sciences and academic and professional fields, as needed (1973, pp. 365-367).

The attitudes of curriculum planners toward scholarly materials influence both the curriculum process and its product (1973, p. 377). In Schwab's opinion, scholarly materials should be viewed as resources to be used in the service of the student. They must be understood and appreciated by students from three perspectives: intent, methods and principles, and access disciplines (1973, pp. 377-378).

According to Schwab, local factors, such as prevailing social class, ethnic character, religious character, and economic status, powerfully influence curriculum planning. He advises against ignoring the existing socio-ethnic views of what is worth learning; the curriculum must reflect the exemplifications of adulthood and the good life valued by the local constituency (1983, p. 242).

Formative evaluation of tentatively selected curriculum materials is conducted concurrently with curriculum deliberation. Matters of efficiency (how well the curriculum selection serves stated intentions), the clarification of values, and the sensitive watch of action and reaction as materials are tried in the class-

room are some of the focuses of the evaluation process (1973, p. 375).

The "how" of practical (deliberative and collaborative) curriculum planning is described by Schwab as consisting of two phases: consideration of curriculum effects and discovery of curriculum potential. Complementing both phases, and operating concurrently with them, is the formative evaluation process. The chairperson's task of coordinating the planning process and moving the group to decision is considered critical to process effectiveness (1973, pp. 380-383; 1983, pp. 252-265).

In the first phase, the planning group studies the effects of present curricula upon the students and their predecessors, and examines their own vision of "the best student grown", or several different "bests" (1973, p. 380). Two commonplaces, the students and their milieux, are the focus of attention, and by means of deliberation in the light of gathered data and scrutinized values (of the participants), the planning committee tries to understand both the students and their milieux (1973, p. 380). In the process, the planners begin to "discover" themselves and their colleagues and arrive at collegiality - a respect for and accomodation of each others

views (1973, p. 380). The pursuit of those two goals, discovery of one another and an understanding of students and their milieux, requires considerable time - as much as 10 or 15 two-hour meetings spread over as many weeks (1973, p. 380). Schwab notes that development of collegiality at this stage requires humility, as opposed to the arrogance of specialism which tends toward debate and argument rather than deliberation (1973, p. 380).

The second phase, discovery of curriculum potential, occurs in two subphases: generating alternatives and deciding among competing curriculum selections (1973, p. 381). Curriculum selections are made as scholarly materials are scrutinized on three criteria: purport, originating discipline, and access disciplines. "One figuratively turns the piece of scholarly material from side to side, viewing it in different lights and considering its suitability for students, teachers, subject, and milieu" (1973, p. 381). Schwab says that "it is impossible to forecast the precise questions which ought to be asked. ... Discovery of the 'right' questions ... depends in the last analysis on the deliberative skill of the planners and the alertness of the chairing curriculum specialist" (1973, p. 382). The task is not merely to determine the value of the forecasted out-

comes. Rather, a number of different values are considered - contribution to learning maturity, effect on the community, and so on. Schwab refers to this as "weighing incommensurables" (1973, p. 382).

Formative evaluation of tentatively accepted curriculum selections takes place in the second phase. The purpose is to improve materials before they are widely distributed (1973, p. 375). Planners are not only concerned with the efficiency with which a given selection serves stated intentions, but with the clarification of intentions and their supporting values. The formative evaluation procedure requires the evaluator to join the experimenting teacher in the classroom when materials are being tested. Both teacher and evaluator engage in an alert watch of student action and reaction as they deal with the materials; they must be particularly careful to note responses unanticipated by the curriculum planners (1973, p. 375). The findings of the evaluator are reported to the planning group through demonstration classes and by means of the usual written reports (1973, p. 375). In this way, the children enter the curriculum discussion and speak for themselves (1973, p. 383).

The role of the group chairperson (the curriculum specialist) is a vital one (1973, p. 368). The chair-

person's main task is "to move the group to effectiveness" (1983, p. 252). The chairperson's three major functions are as follows: to be the countervailing force against the tendency of experts (representatives of the commonplaces) to dominate the planning process; to instigate, administer, and chair the process of developing curriculum embodiments - e.g., student materials and teacher guides; to begin the process of formative evaluation and monitor it (1973, pp. 368-379).

In carrying out these duties, the chairperson undertakes various responsibilities: the research of curriculum problems (visitation of classrooms, homes, workplaces; examination of test results, legal requirements, and textbooks; study of related literature); the removal of barriers to communication among group members; the generation and maintenance of an appropriate deliberative mode of discussion (1983, pp. 252-258).

According to Schwab, the ideal chairperson is skilled in the use of persuasion and elicitation; experienced in problemation, deliberation, and the arts of eclectic; reads learned journals; has knowledge of curriculum practices; and has a liberal acquaintance with academic fields from which school curricula are drawn (1983, pp. 258-265).

Like Macdonald and Purpel, Schwab rejects the linear, deductive or inductive modes of curriculum planning advocated by many previous data sources in favor of interactive, collaborative, dialogical group decision making, referred to as deliberation. Schwab offers what he calls a practical alternative planning process that leads to sustained improvement of schools and that avoids the continual round of fads and bandwagons that presently characterizes the field. Schwab also stresses the formative evaluation of proposed curriculum, as do Macdonald and Purpel and Taba. He particularly emphasizes the role of the process chairperson in deliberative curriculum planning.

A summary of the information gathered from Schwab (1970, 1971, 1973, 1983) is provided in Table 12.

Table 12

Summary of Information Relative to Research Questions from Schwab (1970, 1971, 1973, 1983)

Questions	Schwab (1970, 1971, 1973, 1983)
1. What is the purpose of curriculum planning?	sustained improvement of the schools maintenance and improvement of the curriculum in coherence with what remains useful repair of identified frictions and failures in the curricular machine and the inadequacies of the educational products
2. What are the elements of curriculum planning?	curricular ends (educational purposes) curricular means (student materials, teacher guides, and patterns of teaching and learning) curricular effects (intended and unintended learning outcomes) deliberation formative evaluation of tentatively selected curricular materials
3. Who are the curriculum planners?	a planning group composed of the following people: . teachers (four to six) . school principal . school board or community member . students (one or two) . advisors (representative of academic subjects and social sciences)

(table continues)

Questions	Schwab (1970, 1971, 1973, 1983)
4. What are the contextual factors that influence curriculum planning?	existing educational policy current social science knowledge the accumulated lore of practical curriculum experience curriculum assessment anticipatory generation of alternative solutions size and composition of the planning group attitudes of planning group toward scholarly materials localisms (social and cultural realities) formative evaluation of tentatively selected curriculum materials
5. How does curriculum planning occur?	by means of group deliberation concerning ends and means, relevant facts, alternatives and consequences, and the best course of action to follow Phase One: Consideration of curricular effects: . Study effects of curriculum on students and their predecessors. . Examines group's vision of desired future graduates - "the best student grown". In the process, planners discover one another and develop collegiality. Time required is ten to fifteen two-hour meetings over as many weeks. Phase Two: Discovery of curriculum potential: . Generate alternative curriculum selections. . Choose among the competing curriculum selections

(table continues)

Questions**Schwab (1970, 1971, 1973, 1983)**

Deliberation involves consideration of the purport, originating discipline and access disciplines of each curriculum selection and the "weighing of incommensurables."

Formative evaluation of tentatively accepted curriculum selections (conducted concurrently with phase two)

- . Teacher and evaluator engage in an alert watch of student action and reaction in the classroom when materials are being tested.
- . Special attention is given to unanticipated responses (learnings).
- . Findings are reported through demonstration classes and written reports.

Chairperson (curriculum specialist) plays a key role in "moving the group to effectiveness":

- . instigates, administers, and chairs the process of developing curriculum embodiments
 - . instigates and monitors the process of formative evaluation
 - . functions as a countervailing force against domination of the process by one or several members
 - . tries to remove barriers to effective communication among group members
 - . arranges for necessary research of curriculum problems
-

Tanner and Tanner, 1980

According to Tanner and Tanner, education is responsible for providing each new generation with the social power and insight necessary for intelligently attacking the problems of a common humanity (p. xv). Education is viewed as a dynamic, emergent process rather than an established, invariable one (p. xv).

Tanner and Tanner define curriculum as "that reconstruction of knowledge and experience, systematically developed under the auspices of the school, to enable the learner to increase his or her control of knowledge and experience" (p. 43). This definition is consistent with their conception of education as a dynamic phenomenon. Tanner and Tanner consider their definition of curriculum broad enough to include collateral learnings and hidden curricula and to encompass the whole continuum of ends and means (or curriculum and instruction). Tanner and Tanner reject attempts to definitionally divide curriculum and instruction (pp. 34; 38-39).

According to Tanner and Tanner, curriculum has emerged as a distinct field of educational inquiry that is currently dominated by a paradigm of systematic curriculum planning as reflected and represented by the

Tyler rationale (p. 96). They note the tendency to regard the Tyler rationale as linear in direction, and contend that there is a need to view and apply this curriculum planning model as an organically interactive, interdependent process, in the context of the educational philosophy of the school (p. 97). They espouse an holistic approach that simultaneously considers the interdependence of sources and elements in curriculum planning decisions and addresses both macro- and microcurricular problems. According to Tanner and Tanner, the application of aggregate rather than segmented models will avoid shifting demands and priorities that stem from social crises resulting in reforms that are mere bandwagons.

Other theoretical positions underlying Tanner and Tanner's view of curriculum planning are as follows: if teaching is to be a profession, teachers must have a vital role in curriculum development; although research is often used as a tool of bias rather than a tool of reason, the sources of bias can be minimized and research rendered more effective in solving practical problems if values are brought out in the open and the ways in which they influence the research data are explored; in educational policy, practice, and research, given inputs do

not always produce the same effect in different situations. Different school systems and situations are characterized by vastly different knowledge and ability levels, consequently, efforts to improve curriculum must be coupled with corresponding effort to improve the knowledge and ability levels of administrators, teachers, and parents (p. xvii).

According to Tanner and Tanner, the purposes of curriculum planning are as follows: to reconstruct knowledge and experience for educative purposes and to enable the learner to enhance her or his control of knowledge and experience throughout life (p. 38).

The elements of curriculum planning are objectives, subject matter, methods and organization, and evaluation. They are regarded as organically interactive and interdependent; decision making on each element involves consideration of the interdependent impact it may have. Decision-making is guided by the educational philosophy previously established cooperatively by teachers representing the various subject fields and set forth in a clear statement of what the school can and should do for children and youth (p. 676). Furthermore, decision on objectives, subject matter, etc., which culminates in the curriculum plan or design, should originate from the

evaluation of existing curriculum problems, rather than "parachuted in" from outside the school.

Curriculum planners identified by Tanner and Tanner include the federal government, federal agencies, national and state foundations, testing agencies and organizations, state legislatures and state boards of education, district school boards, schools (principals and teachers), university specialists, and lay citizens (pp. 666-668).

Contextual influences, referred to as curricular sources and influences, are as follows: conflicting educational theories; the nature, needs, problems, and prospects of the society; the nature of the world of knowledge; the nature and needs of the learner. Tanner and Tanner advocate viewing curriculum sources as interactive and interdependent in their influence, and suggest that decisions on the nature and extent of their impact be guided by the educational philosophy of the school.

Decisions affecting school curriculum are made at various levels - national, state, school district, and classroom. Tanner and Tanner believe that curriculum development takes place mainly at the school-system level, the building level, and the classroom level (p.

674). They conceive of the process as being rational and systematic - fundamentally a method of thinking, employing a continuous hypothesis-testing-correction cycle. When decisions are made about objectives, subject-matter, methods and organization, and evaluation, including decisions on scope, sequence, and continuity, due consideration must be given to the interdependence of these dimensions, while drawing upon the interactive, interdependent curricular sources.

According to Tanner and Tanner, there is no one approach to curriculum planning. They suggest that experimentation at the classroom level may lead to correction of the general curricular framework at the school system level. On the other hand, speculative ideas originating at the school system and individual school levels may need to be tried out by individual teachers to develop conceptual schemes upon which a sound design can be based. The hypothesis-testing-correction cycle in curriculum is never ending; approved practices in education are always changing. Hence, curriculum design is a vital, changing thing. Like science, curriculum planning is an "endless frontier" (p. 675).

For Tanner and Tanner, educational philosophy is the compass that guides curriculum decision making. There-

fore, a clear statement of what the school can do for its students is regarded as the first step in the synthesis of objectives and a holistic view of the curriculum. Tanner and Tanner recommend that teachers representing various subjects work together on the objectives of the school and explore different curriculum designs in developing an educational philosophy to guide curriculum decision making (p. 676).

The authors see no substitute for the intelligent participation of the teacher in curriculum planning. They believe that teachers' problems are the wellsprings of innovation, and recommend that teachers should be involved in curriculum adaptation, experimentation, and research, and be provided with the necessary supervisory support, expert help, time, material, and other resources to do the job (pp. 623-655). Lasting improvement in education, they contend, depends on teachers making the transition from technician to diagnostician. They note that teachers tend to function at one of three levels of curriculum development: imitative-maintenance, mediative, or generative-creative. All teachers need to be helped to function at the third level, to deal with new situations as well as established ones, to adapt as well as to adopt, and to deal with macrocurricular

problems as well as with microcurricular problems (pp. 623-655).

The role of the curriculum supervisor (a term used to refer to various persons in positions of curriculum leadership) is, broadly speaking, that of assisting each school to function at the generative-creative level of curriculum planning. This can be accomplished by providing the knowledge, skills, and resources required and by releasing the talent that resides in the school staff (p. 664). The supervisor facilitates sound curriculum design by ensuring that the principles of curriculum planning are followed and that a continuous, rational method of curriculum planning, guided by a sound educational philosophy, is in place. Teachers are taught to think experimentally, and are assisted in the implementation of new ideas. The supervisor is committed to a balanced curriculum; emphasis should not shift from one thing to another as new fads appear (p. 682).

In comparing Tanner and Tanner's conceptualization with previous data sources, it must be noted that Tanner and Tanner accept the Tyler rationale as "the" paradigm of curriculum planning. In reaction to the common perception that it is essentially linear, they argue that this is not the case. They stress the need to view it as

holistic, interactive, and interdependent, so that any decision requires consideration of its effects on all other decisions.

Like Saylor et al. (1981), Tanner and Tanner emphasize the personal development of the learner as a purpose of curriculum planning. They also stress the dynamic character and complexity of curriculum, which demands diversity in planning, guided by the compass of educational philosophy. Tanner and Tanner's emphasis on the role of philosophy in curriculum planning parallels that of previous data sources, such as Eisner and Macdonald and Purpel.

A summary of the information gathered from Tanner and Tanner (1980) is presented in Table 13.

Table 13

Summary of Information Relative to Research Questions from Tanner and Tanner (1980)

Questions	Tanner and Tanner (1980)
1. What is the purpose of curriculum planning?	To enable the learner to enhance his or her control of knowledge and experience throughout her or his life. To reconstruct knowledge and experience, systematically developed under the auspices of the school, for educative purposes.
2. What are the elements of curriculum planning?	objectives subject matter methods and organization evaluation philosophy
3. Who are the curriculum planners?	federal government and federal agencies national and state foundations testing agencies state legislatures and state boards district school boards schools (principals and teachers) university specialists lay people
4. What are the contextual factors that influence curriculum planning?	conflicting educational theories society knowledge learner

(table continues)

Questions	Tanner and Tanner (1980)
5. How does curriculum planning occur?	at multiple levels: national, state, school district, building, classroom, and outside the school structure rational and systematic -- a method of thinking, the hypotheses-testing-correction cycle that is continuous and occurs at all levels The process is guided by the compass of philosophy of education, which can lead to curriculum synthesis, a holistic view of what the school can and should do. Decisions are made about curriculum objectives, subject matter (content and process), methods and organization, and evaluation, not linearly, as separate and distinct entities, but as organic, interactive, and interdependent phenomena arising out of the education process. The various interactive curriculum sources and forces are taken into consideration -- conflicting educational theories, studies of contemporary society, studies of the nature and needs of learner, and studies of the nature of knowledge. How the curriculum sources are drawn upon and the nature and extent of their influence is determined by a sound educational philosophy. Curricular objectives should arise from the educative process and be tested by that process.

(table continues)

Questions	Tanner and Tanner (1980)
	Teachers should be actively involved in curriculum adaptation, experimentation, and research. Curriculum supervisors assist each school and teacher to function at the generative-creative level of curriculum development, employing a systematic curriculum development framework, guided by a sound educational philosophy.

Summary

In this chapter the results of the first phase of the research, exploration, were reported. The data extracted from the study's major data sources in answer to the following questions was systematically described:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence m curriculum planning?
5. How does curriculum planning occur?

The data were described in a written format that included a brief comparison of data sources. It was also presented in point form in a table for each data source. The order of data presentation was based on the ranking of data source citations in synoptic curriculum textbooks. Critical analysis was not the objective of this phase of the study. The data will be subjected to descriptive analysis and classification in the next chapter.

CHAPTER IV: DESCRIPTION AND CLASSIFICATION

Introduction

In this chapter, the results of two phases - description and classification - of the interpretative-theoretical methodology are presented. Description involves the systematic juxtaposition and analysis of information extracted from the major data sources in response to the five questions posed in the exploration phase of the study:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence curriculum planning?
5. How does curriculum planning occur?

Answers to these questions are presented in the first section of this chapter. A subsection is devoted to each research question.

Classification, the third phase of the methodology, is presented in the second section of the chapter. The purpose of this phase is to organize and clarify findings about curriculum planning. Three distinct but inter-related procedures are involved: analyzing, abstracting,

and generalizing. These activities generate the components of the theoretical model that emerge from the research. The subsections in this part of the chapter report the results of the classification activities for each research question. A summary constitutes the third section of the chapter.

Description of Data Relative to Research Questions

Answers to the research questions provided by the major data sources are analysed and described in this section. Similarities, differences, and peculiarities are noted, as required in this phase of the interpretative-theoretical methodology.

Purpose of Planning

Seven of the major data sources explicitly identify the formulation or modification of an educational program as the immediate purpose of curriculum planning. Formulation-modification is implied in the treatment of curriculum planning by all other data sources. For

example, Goodlad's statement of purpose, "to produce valid and justifiable learnings", implies that curriculum planning is a process of either formulation or modification.

Data sources differ on the nature of educational programs or plans, depending on their theoretical orientations. For example, Bobbitt limits an educational program to activities and experience that prepare students for the activities of adult life. Macdonald and Purpel, on the other hand, appear to favor something broader - a program for human liberation, the acquisition of transcendent meaning, and the nourishment of democracy.

An analysis of the major data sources revealed 26 statements of purpose for curriculum planning. These statements are presented in Table 14. Some of them express essentially the same idea, and could have been presented in clusters or categories. However, categorization is inappropriate in the analysis phase of the interpretative-theoretical methodology. It occurs in the classification phase of the research.

Table 14

Purposes of Curriculum Planning from an Analysis of Major Data Sources

-
1. To conduct inquiry, criticism, reexamination, research, and reevaluation of the curriculum and to solve curriculum problems
 2. To develop a plan for changing student behavior in desired directions
 3. To develop a plan for learning - a way of preparing young people to participate as productive members of the culture
 4. To develop self-directing, continuous learners
 5. To embody the transcendent, both in its cultural and spiritual meanings
 6. To enable the learner to enhance his or her control of knowledge and experience throughout her or his life
 7. To enable teachers to effect desired changes in student behavior
 8. To improve the knowledge, skills, and attitudes of learners and to help them live meaningful and satisfying lives
 9. To improve the structure and the documents of the curriculum
 10. To influence, through the curriculum, the form and direction of social development
 11. To maintain and improve the curriculum in coherence with what remains useful
 12. To modify or change the school's educational program to keep it up to date and in line with present social and psychological realities
 13. To nourish a democratic community
 14. To organize a program of activities and experiences that prepare students for the activities of adult life
 15. To organize a program of educational objectives and experiences for students in a school
 16. To plan curriculum for the moral enterprise of education - a series of "shoulds", mastery of which will lead students to be "good" persons, to live "good" lives, and to make a "good" society
 17. To plan an educational program of human liberation and related goals, such as skill mastery, informative knowledge, and explanation

(table continues)

18. To produce valid and justifiable intended learnings
 19. To provide an important educative opportunity for participants involved in the curriculum process
 20. To provide for sustained improvement of the school
 21. To reconstruct knowledge and experience, systematically developed under the auspices of the school, for educative purposes
 22. To repair identified frictions and failures in the curricular machine and the inadequacies of the educational products
 23. To select and sequence potential learning experiences for disciplining children and youth in group ways of thinking and acting
 24. To stimulate learning on the part of all who are concerned with the curriculum
 25. To transform educational images and aspirations into effective educational programs
 26. To try to achieve a set of consistent ideas and values in which all members of the society can share
-

Elements of Planning

Analysis of the major data sources revealed 54 elements or tasks involved in the curriculum planning process. These elements are presented in Table 15.

All 12 data sources include purposes, learning experiences, organization, and evaluation as major tasks or elements of curriculum planning, although different terminology is used in some cases. For example, Goodlad prefers the term learning opportunity to learning experience, which is used by Tyler. Eisner uses goals and

objectives instead of purposes; Macdonald and Purpel use platform to refer to curricular purposes and values.

Goodlad refers to the four curriculum elements as substantive elements. He adds two categories of elements: social-political and technical-professional elements. Goodlad's social-political decision-making is not unlike the process Schwab calls deliberation and that Macdonald and Purpel refer to as interpretation.

Eisner considers planning for instruction, or the modes of presentation and response, an element. Saylor et al. and Doll refer to this element of curriculum planning as implementation. Tanner and Tanner call it methods and organization.

Elements of the curriculum planning process that are peculiar to a single data source are as follows: engineering (Smith et al.), analysis of adult activities (Bobbitt), philosophy (Tanner & Tanner).

Schwab and Macdonald and Purpel are unique among the data sources in their emphasis on interactive, dialogical, deliberative planning as major process elements.

Many of the elements presented in Table 15 are not discrete. Some could have been presented in clusters. However, categorization is inappropriate in the description phase of the research; it occurs in the next phase, classification.

Table 15

Elements of Curriculum Planning from an Analysis of Major Data Sources

1. Aim or intention
2. Aims and objectives
3. Aims or goals
4. Allotment and distribution of instructional time
5. Alteration of existing curriculum
6. Analysis of adult activities
7. Consensus decision making (or as near to consensus as possible)
8. Content
9. Curricular effects (intended and unintended learning outcomes)
10. Curricular ends (educational purposes)
11. Curricular means (student materials, teacher guides, and patterns of teaching and learning)
12. Curriculum designing
13. Curriculum evaluation
14. Curriculum implementation
15. Data gathering and analysis
16. Deciding on design(s)
17. Design
18. Deliberation
19. Dialogue
20. Evaluating program or project
21. Evaluation
22. Evaluation: formative (of tentatively selected curricular materials)
23. Evaluation means
24. Evaluation procedures
25. Experiences
26. Goals and objectives

(table continues)

27. Goals and their priority
 28. Implementation
 29. Interpretation
 30. Learning experiences
 31. Learning opportunities
 32. Methods and organization
 33. Modes of presentation and response
 34. Objectives
 35. Organization
 36. Participant observation
 37. Philosophy
 38. Platform
 39. Planning for implementation
 40. Planning
 41. Preplanning (educational philosophy)
 42. Pupil activities and experiences
 43. Purposes
 44. Selection of design(s)
 45. Selection of learning content
 46. Selection of subject matter
 47. Sequence, integration, and local adaptation
 48. Sequencing of subject matter and grade placement
 49. Social-political decisions
 50. Stating or reviewing aims
 51. Stating program or project objectives
 52. Subject matter
 53. Technical-professional decisions
 54. Validation of educational objectives
-

Curriculum Planners

Implicit in the question "Who plans the curriculum?" are concerns about expertise and experience, authority and influence, and representation of special individuals and groups and the broader public interests of a democratic society. Analysis revealed that teachers, students, parents and other lay citizens, academic and professional advisors, administrators, consultants, school board members and legislators are viewed as the curriculum planners by most data sources.

For some data sources, who participates in the planning process depends on the level of authority at which planning occurs, whether instructional, institutional, or societal (Goodlad). Tyler advocates that the school should be the main site of curriculum planning and that there should be faculty-wide involvement in the process. Bobbitt discusses curriculum planning at the school district level, describing the roles of teachers, principals, the superintendent, and other professional staff. Bloom advocates the establishment of an autonomous center for curriculum development. He favors a team approach involving teachers and various academic and professional experts. Goodlad and Eisner discuss

multiple levels of curriculum planning, encompassing the school, the district, and the state. They describe the roles that parents, lay citizens, students, school-board members, and legislators should play in the process.

The 12 data sources advocate the participation of teachers in planning curriculum. The need for subject specialists, knowledgeable and experienced curriculum planners, and various other professional advisors (e.g., psychologists, sociologists) is discussed by eight data sources. Seven data sources advocate the involvement of parents and other lay citizens; five data sources stress the importance of student participation.

Several data sources identify people and organizations outside of the educational system as potential participants in the process, or as sources of influence, as follows: federal government and national agencies (Bloom; Doll; Tanner & Tanner); university research and development centers and educational laboratories (Eisner); commercial publishers (Eisner; Doll); testing agencies (Doll; Tanner & Tanner); foundations (Tanner & Tanner); teacher organizations (Doll).

Sixty-nine statements identifying participants in the curriculum planning process are presented in Table 16.

Table 16

Participants in Curriculum Planning from an Analysis of Major Data Sources

1. Administrators
2. Administrators and supervisors
3. Advisors (academic)
4. Authors
5. Board of education
6. Boards of education
7. Citizens
8. Colleges and universities
9. Commercial publishers
10. Community educators
11. Content specialists
12. Counselors
13. Curriculum consultants
14. Curriculum directors and coordinators
15. Curriculum specialists
16. Directors of personnel
17. Educational foundations
18. Educational laboratories
19. Educational planners
20. Evaluation specialists
21. Federal government
22. Federal government and agencies
23. Foundations
24. Individual students
25. Individual teachers
26. Lay members of community
27. Lay people
28. Lay representatives

(table continues)

29. Lay persons
30. Learners
31. Legislatures
32. Makers of educational materials
33. National educational policies commission
34. Other lay people
35. Parents
36. Persons with needed talent
37. Principals
38. Pupils
39. Regional organizations
40. Representatives of those directly involved and affected
41. Resource specialists
42. Scholars
43. School board or community member
44. School districts
45. School staff
46. School staffs
47. Schools (principals and teachers)
48. Specialists in child development
49. Specialists in group dynamics and research
50. State agencies
51. State boards of education
52. State departments of education
53. State legislatures
54. Students
55. Students (one or two)
56. Subject specialists
57. Superintendent and professional staff
58. Teacher
59. Teachers

(table continues)

60. Teachers (four to six)
 61. Teachers and teacher aides
 62. Teachers' organizations
 63. Test makers
 64. Testing agencies
 65. To be determined within the context of each setting and the particular issue
 66. University and college teachers
 67. University research and development centers
 68. University specialists
 69. Variety of specialists representing the school subjects and other disciplines - sociology, psychology, economics, political science, philosophy, guidance, and educational measurement
-

Contextual Influences

Taba identifies the following as major forces and influences in curriculum planning: the learner and learning, the society and culture, the nature of knowledge, and the role of the school. Taba also discusses the impact of philosophy and leadership. These same contextual factors are identified as potentially influential by other data sources in this study.

Eleven data sources discuss learner needs and the psychological bases of the curriculum. Ten data sources examine the influence of societal factors, such as:

trends and issues (Eisner); demands (Taba); political, economic, and value changes (Bloom); and barriers to personal and cultural fulfillment (Macdonald & Purpel). Six data sources identify understandings and theories of the nature of knowledge as potentially influential in curriculum planning. Three data sources explore the influence of conceptions of the role of the school in society; four consider the impact of school and classroom characteristics, or school culture.

The relations among belief, ideology, and philosophy (i.e., individual and institutional philosophy) and the nature of curriculum and its planning are discussed by eight data sources. Goodlad (1979) examines the role of prior decisions. Eisner discusses assumptions, definitions, and theories of curriculum and the influence of personal curriculum orientations. Macdonald and Purpel consider the developer's platform an important factor.

Leadership (e.g., roles, expertise, organization) is discussed by five data sources. The effect of curriculum planning models on the process of planning curriculum is described by Taba and Macdonald and Purpel. Miscellaneous process factors - training, deployment, task differentiation, the group work climate, the size of working group, the pace and control of change, the gener-

ation of alternative solutions, the formative evaluation of proposed curriculum materials, educational criticism - are discussed by Goodlad and Saylor et al.

Doll, Macdonald, and Schwab draw attention to the influence of history on curriculum planning. This is a recent addition to the list of contextual factors influencing the planning process. Also, Macdonald and Purpel's emphasis on the developers' platform and its transcendent, metaphysical, moral, political, and aesthetic character contrasts sharply with the conceptions of other data sources.

The 108 contextual factors influencing curriculum planning identified by the data sources are presented in Table 17.

Table 17

Contextual Influences on Curriculum Planning from an Analysis of Major Data Sources

-
1. Anticipatory generation of alternative solutions
 2. Apparent needs of the pupil population
 3. Apparent needs of the teachers
 4. Assistance of specialized groups
 5. Attitudes of planning groups toward scholarly materials
 6. Barriers to personal and cultural fulfillment - injustice, war, etc.
 7. Beliefs
 8. Boards
 9. Broad social and psychological realities operating in the culture
 10. Changes in knowledge and subject matter
 11. Characteristics of each school situation
 12. Civil interests
 13. Classroom culture
 14. Client perceived needs and wants
 15. Colleges and universities
 16. Community expectations
 17. Competencies of participants
 18. Competencies of potential participants in planning curriculum
 19. Conceptions of the nature of knowledge
 20. Conflicting educational theories
 21. Contemporary life outside school
 22. Contemporary social forces
 23. Control within the school
 24. Conventional wisdom
 25. Courts
 26. Critics of education
 27. Current social science knowledge
 28. Curriculum assessment

(table continues)

29. Curriculum development sequence, whether deductive or inductive
30. Curriculum influences
31. Curriculum orientation: academic rationalism
32. Curriculum orientation: curriculum as technology
33. Curriculum orientation: development of cognitive processes
34. Curriculum orientation: personal relevance
35. Curriculum orientation: social adaptation and social reconstruction
36. Curriculum problems in the local school or district
37. Department chairpersons (school)
38. Data on nature of learners (both learners in general and the learners for which curriculum is being planned)
39. Data on society
40. Definition of curriculum
41. Demands of society and culture
42. Deployment of expertise
43. Descriptive theory of curriculum
44. Developer's platform: aesthetic characteristics
45. Developer's platform: ethical characteristics
46. Developer's platform: historical qualities
47. Developer's platform: moral characteristics
48. Different curricular ideas and materials
49. Differentiation of tasks
50. Diverse student ability levels
51. Division in community on educational objectives
52. Educational philosophy of the school
53. Existence of a school-based inservice education program
54. Existing educational philosophy
55. Explicit curriculum
56. External and internal influences on individual planners
57. Formative evaluation
58. Funded knowledge

(table continues)

59. Groups demanding curriculum change
60. Group work climate
61. Historical and cultural content of planning process
62. Historical and philosophical foundations of curriculum
63. History of curriculum planning
64. Ideological assumptions and aspirations
65. Knowledge
66. Knowledge of learners and learning
67. Education authority
68. Leadership of principal
69. Leadership roles and skills
70. Leadership of superintendent and professional staff
71. Learner
72. Learners' needs, interests and, abilities
73. Legal requirements
74. Legislatures
75. Localisms (social and cultural realities)
76. Model of planning in use
77. Nature of subject matter
78. New knowledge of the learner and the learning process
79. Normative theory of curriculum
80. Null curriculum
81. Organization and function of personnel
82. P.T.A.
83. Parent involvement
84. Prior decisions of curriculum developers on fundamental curricular issues:
source of authority, nature and source of objectives, the social function of
education and content selection criteria
85. Prior decisions of other levels of planning
86. Professional educator groups
87. Professional interests of teachers and administrators
88. Professional knowledge

(table continues)

89. Psychological bases of the curriculum: learner's growth and development; individual differences in learners; understanding of the learning process
 90. Psychology of learning
 91. Quality of curriculum leadership by local teachers
 92. Quality of curriculum planning research
 93. Size and composition of the planning group
 94. Social and cultural forces in society at large and in the immediate community
 95. Social change - political, economic, and value
 96. Social organization of the school
 97. Social psychology
 98. Society (social problems and forces)
 99. Society's conception of the role of the school
 100. Source of change
 101. Student's background and culture
 102. Subject specialists
 103. Teacher involvement
 104. Technological feasibility data
 105. Testing agencies
 106. Training for curriculum development
 107. Trends and issues affecting curriculum
 108. Values
-

Mode of Planning

According to Tanner and Tanner and Schubert, the dominant paradigm of current curriculum planning is the Tyler rationale. It sets forth procedures for studying and answering four fundamental questions on educational purpose, learning experiences, organization and evaluation. The focus is the local school; planning is the responsibility of the school faculty, organized into committees. Learners, society, and subject specialists are the primary sources of curricular objectives, and selection is made by employing the screens of philosophy and psychology. Objectives and other selection criteria are used to select and organize learning experiences and for evaluation.

Theoretical conceptualizations by other data sources are similar in essence. Some claim to be distinctive - less linear, more flexible, more dialectical in approach, and more responsive to the political character of the planning process. Nevertheless, it remains an open question as to whether or not all theoretical modes of planning described by data sources are essentially concerned with the same fundamental questions (Walker & Soultis, 1986).

Analysis of major data sources revealed 259

statements on how curriculum planning occurs. These are presented in Table 18.

Table 18

Statements of How Curriculum Planning Occurs From an Analysis of Major Data Sources

1. A four-phase, systematic process of social engineering
2. Ad hoc committees
3. Ad hoc committees formed for a specific purpose
4. Ad hoc committees that attend to pressing concerns
5. Anticipating the future
6. Applying evaluation means
7. Approving the work of subcommittees
8. Arranging and guiding evaluation
9. Assessment of the needs
10. At multiple levels - national, state, school district, building, teacher
11. Attending to live instructional problems of teachers
12. By means of group deliberation about ends and means, relevant facts, alternatives and consequences, and the best course of action to follow
13. By surveying the scene
14. Center for curriculum development and research administers the planning process.
15. Center for curriculum development and research creates a pool of suggested learning experiences for classroom use
16. Center for curriculum development and research constructs evaluation instruments.
17. Center for curriculum development and research mobilizes human resources.
18. Center for curriculum development and research mobilizes material resources.
19. Center for curriculum development and research plans and conducts the necessary teacher inservice training.
20. Center for curriculum development and research suggests and tries out procedures for learning experiences.
21. Central office supervisors
22. Central steering committee(s)

(table continues)

23. The chairman (curriculum specialist) arranges for necessary research of curriculum problems.
24. The chairman (curriculum specialist) instigates, administers, and chairs of the process of developing curriculum embodiments.
25. The chairman functions as a countervailing force against domination of the process by one or several members.
26. The chairman instigates and monitors the process of formative evaluation
27. The chairman tries to remove barriers to effective communication among group members
28. Chairperson (curriculum specialist) key in "moving the planning group to effectiveness"
29. Check for balance and sequence.
30. Check for vertical and horizontal articulation of goals and culture content.
31. Choose overall structure of curriculum.
32. Choose leader of curriculum planning carefully.
33. Choose participants carefully, based on interest and ability.
34. Combine curriculum development and training for curriculum development.
35. Communication guideline: Allow time for communication.
36. Communication guideline: Employ both formal and informal channels of communication.
37. Communication guideline: Have one person or group watch over communications.
38. Communication guideline: Keep communication unit small.
39. Communication guideline: Keep messages brief, direct, and pointed.
40. Community participates through advisory councils, committees, meetings, surveys, etc.
41. Competent curriculum developers
42. Conceptualizing the work
43. Conducted by the curriculum engineering system, responsible for production, implementation, and evaluation of curriculum
44. Confrontation of purpose and value questions
45. Consider questions of sequence, integration, and local adaptation throughout the

(table continues)

development process

46. Consider program implementation in the planning phase
47. Consultants used as resource people, rather than as agents of change
48. Coordinating activities
49. Corrections are made, resulting in a shared vision and shared goals throughout the organization
50. Creating phase: Select a curriculum design and write the curriculum.
51. Criteria of dialogue substance: ideal and actual
52. Criteria of dialogue substance: the abstract and the concrete
53. Criteria of dialogue substance: the individual and the group
54. Criteria of dialogue substance: understanding and meaning
55. Curricular objectives should arise from the educative process and be tested by the process.
56. Curriculum planning strategy: master planning
57. Curriculum supervisors actively assist each school and teacher in curriculum development.
58. Decide among the competing curriculum selections through the process of deliberation.
59. Decision by consensus (or as much consensus as possible)
60. Decisions are made on objectives, subject matter, methods and organization, and evaluation, not as separate and distinct entities, but as organic, interactive, interdependent phenomena; consideration is made of the various interactive curriculum sources and forces.
61. Deliberations of the bottom are passed up as suggestions.
62. Deliberations of the top are passed down as suggestions.
63. Delineation of precise behavioral objectives (instructional level)
64. Department committees
65. Deploy multiple leaders with expertise in curriculum production and group processes.
66. Determination of student activities and experiences suitable for pursuing the objectives

(table continues)

67. Develop curriculum framework.
68. Develop general objectives (institutional level).
69. Diagnose needs.
70. Differentiate tasks by individuals and groups.
71. Deliberation involving consideration of ends and means as mutually determining one another: Ascertain facts, identify desiderata, generate alternative solutions, weigh the alternatives, choose the best course of action.
72. Dissemination of information about the project at various stages, using diverse means
73. Eclectic approach (structured committee, inductive decision making, and problem solving)
74. Educational philosophy should determine how the curriculum sources are drawn upon and the nature and extent of their influence.
75. Employ a planning strategy of heterogenous participation.
76. Encourage participants to do a good job.
77. Establish a center for curriculum development and research for developing the overall curriculum.
78. Establish time limits for completing work.
79. Evaluate the curriculum.
80. Evaluate curriculum, teaching, and learning, employing the following criteria: educational significance, developmental appropriateness, suitability to students' background and interests, diversity of modes of presentation, quality of teaching, and outcomes achieved.
81. Facilitate communication
82. Fix responsibility for subparts of planning operation.
83. Form work groups on the basis of job requirements.
84. Formative evaluation findings are reported through demonstration classes and written reports.
85. Formative evaluation involves the evaluator and classroom teacher in an alert watch of student action and reaction when materials are being tested.
86. Formative evaluation of tentatively accepted curriculum selections, to discover

(table continues)

their potential

87. Formative evaluation pays special attention to unanticipated responses or learnings.
88. Formulate objectives
89. Formulation of aims (societal level)
90. Generate alternative curriculum selections through the process of deliberation.
91. Getting action started
92. Give credit to planners.
93. Grade level committees
94. Guidelines for form of dialogue: aesthetic sensibility
95. Guidelines for form of dialogue: celebrate diversity
96. Guidelines for form of dialogue: free-flowing imagination
97. Guidelines for form of dialogue: intellectually rigorous
98. Guidelines for form of dialogue: need to reflect values of platform
99. Guidelines for form of dialogue: personally nonjudgmental
100. Guidelines for form of dialogue: sensitive to personal dignity
101. Have criteria for determining what is to be done.
102. Hold planning sessions when needed.
103. Hothouse trials
104. Identification of objectives through analysis of adult activities
105. Identifying and assigning personnel
106. Identifying and defining problems
107. Inservice for teachers who will be using the materials
108. Inductive approach
109. Install and disseminate curriculum.
110. Integrate many competencies into the work team.
111. Investigate the sources of objectives: learners.
112. Investigate the sources of objectives: society.
113. Investigate the sources of objectives: subject specialists.
114. Lay advisory committees
115. Leaders require a knowledge of the disciplines and expertise in curriculum

(table continues)

development and human relations.

116. Leadership abilities required: ability to develop the creative abilities of others
117. Leadership abilities required: ability to plan and organize
118. Leadership abilities required: ability to practice good human relations
119. Leadership abilities required: ability to relate quickly to other people
120. Leadership abilities required: ability to solve educational problems
121. Leadership abilities required: ability to use group process techniques
122. Leadership abilities required: adherence to principles of human growth and development
123. Leadership abilities required: knowledge of where, when, and how to change the curriculum
124. Leadership is conceived of as a functional role of a group member, involving the definition of groups' needs and goals.
125. Leadership should be provided by the local teaching profession in four areas: art of teaching, disciplines, values, and social engineering.
126. Locating facilities and materials
127. Logistical concerns: extent of members' involvement
128. Logistical concerns: size of group
129. Maintain climate for productive work: Assure protection of individual viewpoints
130. Maintain climate for productive work: Conduct deliberations in a permissive atmosphere.
131. Maintain climate for productive work: Cultivate and distribute natural leadership ability.
132. Maintain climate for productive work: Develop a collective focus.
133. Maintain climate for productive work: Keep group composition and manner of work flexible.
134. Maintain climate for productive work: Maintain clear channels of communication.
135. Maintain climate for productive work: Maintain continual communication between pilot groups and the rest of the staff.
136. Maintain climate for productive work: Maintain good public relations with people

(table continues)

and organizations outside the school system.

137. Making and evaluating proposals
138. Managerial planning (envisioning the process and the product): initiating, suggesting, directing, and coordinating the technical production process
139. Maximum size of work group: 15
140. More extensive field testing
141. Open participation
142. Organization of learning opportunities
143. Organize content.
144. Organize learning experiences.
145. Organize learning experiences horizontally.
146. Organize learning experiences vertically.
147. Organize objectives and student activities into a program of general education.
148. Organize principals to plan curriculum for several buildings.
149. Organize superintendent and professional staff to formulate the most general plans and policies.
150. Organize teachers to plan course details and classroom activities.
151. Organize the work force.
152. Orientation to project
153. Perception of having the power to change things on the part of the participants
154. Phase four: planning curriculum evaluation, formative and summative, for the total program and various segments of it
155. Phase four: social engineering process - the establishment of a new constellation of forces to sustain the new curriculum
156. Phase one: data gathering and analysis, to gain historical and theoretical perspective on particular issue in relation to platform
157. Phase one: examination of group's vision of desired future graduates - "the best student grown"
158. Phase one: Planners discover one another through the process of deliberation and develop collegiality. Time required is 10 to 15 two-hour meetings over as many weeks.

(table continues)

159. Phase one: setting major goals, domains and objectives through basic data analysis. State purposes of education; identify institutional goals and domains, list curriculum subgoals, state instructional objectives. (Process not necessarily linear.)
160. Phase one: study of the effects of curriculum on students and their predecessors
161. Phase one: systematic social engineering process - diagnostic study of the school community situation to ascertain the constellation of forces that maintain the existing curriculum
162. Phase three: Anticipate curriculum implementation (instruction).
163. Phase three: interpretation. Planners share conceptions and their own biographies to arrive at decisions and recommendations.
164. Phase three: social engineering process - control of the various forces in order to move from the existing level of practice to a desired level. Strengthen the driving forces while reducing the restraining forces; attend to crucial forces of insecurity. If morale is low, deal with "sore spots" before attempting major change. Try to arrive at common conceptions of problems and solutions.
165. Phase two: Design and write a curriculum plan consistent with major goals and objectives in six steps:
 - Consider basic factors relating to the major goal and domain.
 - Identify the subgoals of the domain.
 - Identify possible learning opportunities.
 - Settle on appropriate curriculum designs.
 - Prepare tentative design specifications.
 - Identify requirements for implementation
166. Phase two: discovering curriculum potential.
 - Generate alternative curriculum selections.
 - Decide among the competing selections.
167. Phase two: participant observation. Planners become directly involved in the issue through ongoing programs or experimental pilot programs.
168. Phase two: systematic social engineering process. Induction of change in the existing equilibrium to loosen the constellation of forces. Induction

(table continues)

techniques: analysis of forces and selection of starting points, using equilibrium diagram.

169. Possible curriculum planning strategy: coordinated local planning
170. Possible curriculum planning strategy: experimentation and research
171. Possible curriculum planning strategy: inservice education and staff development
172. Possible curriculum planning strategy: planned programs of supervision
173. Preparing designs
174. Problem-solving approach
175. Proceeds by proposing courses of action to follow and discussing the pros and cons of each, until satisfied with one
176. Process: interpretation from level to level
177. Process: guided by compass of philosophy of evaluation, which leads to curriculum synthesis
178. Process: logical derivation and evaluation of curriculum substance
179. Process: social-political transaction within levels, between levels, and between levels and milieu
180. Produce pilot units: Check for balance and sequence.
181. Produce pilot units: Diagnose needs.
182. Produce pilot units: Evaluate.
183. Produce pilot units: Formulate objectives.
184. Produce pilot units: Organize content.
185. Produce pilot units: Organize learning experiences.
186. Produce pilot units: Select content.
187. Produce pilot units: Select learning experiences.
188. Provide planners with necessary time, resources, and materials.
189. Rational and systematic
190. Recourse to knowledge sources
191. Responsible representation on committees
192. Revise curriculum
193. Revise and consolidate pilot units

(table continues)

194. Rotate individual and group work
195. School-wide planning council
196. Screen objectives through philosophy
197. Screen objectives through psychology of learning
198. Select content
199. Select learning experiences.
200. Select learning experiences according to explicit criteria.
201. Selection of development team
202. Selection of illustrative learning opportunities (institutional level)
203. Selection of modalities of presentation and response
204. Selection of organizing centres (instructional level)
205. Sharing of beliefs
206. Stage one: Decide on objectives and state behaviorally.
207. Stage three: Decisions on evaluation procedures to assess student learning and curriculum effectiveness with sample(s) of students and teachers
208. Stage two: Decisions on learning experiences
209. Start small by involving only a few people at first.
210. Start with the concerns of teachers.
211. Starting point: anywhere
212. State objectives, indicating behavior and content.
213. Statement of intentions: aims, goals, and objectives (behavioral, problem solving, expressive)
214. Structured committee approach
215. Strong individual leadership in planning groups
216. Students sit in on planning groups, depending on maturity levels.
217. Substance of dialogue criteria: congruence with values of framework
218. Substance of dialogue criteria: society and culture
219. Suggested tasks for laypersons: Serve as member of citizen advisory committee.
220. Suggested tasks for laypersons: Serve as member of school lay cabinet.
221. Suggested tasks for laypersons: Serve as resource persons.
222. Suggested tasks for principals: Arrange of work loads.

(table continues)

- 223. Suggested tasks for principals: Encourage teacher evaluation.
- 224. Suggested tasks for principals: Facilitate inservice.
- 225. Suggested tasks for principals: Provide teacher orientation.
- 226. Suggested tasks for principals: Recruit able teachers.
- 227. Suggested tasks for principals: Support program change.
- 228. Suggested tasks for pupils: Conduct surveys.
- 229. Suggested tasks for pupils: Serve on committees.
- 230. Suggested tasks for pupils: Serve as subjects of study.
- 231. Suggested tasks for pupils: Try out tests and materials.
- 232. Suggested tasks for pupils: Work for committees.
- 233. Suggested tasks for superintendent: Aid communication.
- 234. Suggested tasks for superintendent: Encourage efficient problem solving.
- 235. Suggested tasks for superintendent: Facilitate participation.
- 236. Suggested tasks for superintendent: Interpret program revisions to school boards.
- 237. Suggested tasks for superintendent: Lend active support.
- 238. Suggested tasks for superintendent: Seek funds, personnel, and materials.
- 239. Suggested tasks for supervisors: Advise on curriculum trends.
- 240. Suggested tasks for supervisors: Assist with staff development.
- 241. Suggested tasks for supervisors: Encourage and trouble shoot.
- 242. Suggested tasks for teachers: Serve on department committees.
- 243. Suggested tasks for teachers: Serve on grade level committees.
- 244. Suggested tasks for teachers: Try to evaluate materials.
- 245. Supervising the planning process
- 246. Surveying curriculum needs
- 247. Sustained deliberation
- 248. System-wide faculty organizations
- 249. Teachers actively involved in curriculum adaptation, experimentation, and research.
- 250. Teachers participate in planning, implementing, and negotiating curriculum
- 251. Test pilot units.

(table continues)

- 252. The local school community situation should be the dynamic factor in curriculum change.
 - 253. There should be a curriculum advisory council to the faculty and administration.
 - 254. There should be provision for community-wide participation in the curriculum process.
 - 255. There should be a center for curriculum development and research.
 - 256. There should be a committee on communications to oversee communication of both information and perspectives.
 - 257. There should be both vertical and horizontal organization of personnel to facilitate communication and collaboration
 - 258. There should be minimal restraint on the expression of points of view and ideas and on information exchange.
 - 259. Through a centrally coordinated approach serving the whole school system
-

Summary

This section contained information obtained from an analysis of major data sources relative to the five research questions. In the following section, classification of the information gathered and analysed is presented.

Classification of Data Relative to Research Questions

This phase of the interpretative-theoretical methodology involved the categorization of the results of the analysis of major data sources. Through the categorization process, data were organized to foster understanding of the components of curriculum planning used in model building. The five research questions served as the parameters of categorization. In this section, the results are discussed in five subsections, one for each of the questions. The sixth subsection of the chapter provides a summary of the classification phase.

Purpose of Planning

The 12 major data sources conceive of curriculum planning as a process of modifying an existing educational program or formulating a new program. In some purpose statements, this conception is explicitly supported by such phrases as "to organize a program", "to develop a plan", and "to modify or change the school's educational program". When not stated explicitly, curriculum modification or formulation is implied in the

statement of purpose and confirmed in the supporting text material. Even when there is no reference to programming or planning in the statement of the purpose of curriculum planning, the data sources reviewed view curriculum as a phenomenon that can be formulated and modified. The purposes of curriculum cited from data sources were classified according to their major focus of attention - the learner, the society, the school, and the curriculum or the curriculum planning process itself - and the ultimate educational benefits desired in each case.

The ultimate purposes of curriculum planning identified by sources whose major focus of purpose is the learner include the following: productive membership in the culture; behavioral change; improved knowledge, attitudes, and skills; greater personal development and satisfaction in life; self-directedness and a capacity for continuous learning; personal liberation from unnecessary constraints to human dignity and potential; personal morality - being a "good" person and living a "good" life; better control of knowledge and experience throughout life.

The ultimate purposes of curriculum planning identified by data sources whose major focus of attention is the society include the following: development of a

shared set of consistent ideas and values; improved social development; the nourishment of a "good", democratic society.

The ultimate purposes of curriculum planning identified by data sources whose major focus of attention is the school and its educational program include the following: improvement in response to identified problems and inadequacies, as opposed to faddish or bandwagon change; programming that admits to other knowledge reality than that comprehended through the senses; programming that exploits a variety of modalities of learning; programming that provides for criticism, evaluation, research, and problem solving.

Several data sources give purposes for planning that focus on the nature of the process itself: the process should stimulate learning on the part of the participants (planners), and maximize participation and the sharing of values, biographies, and expertise in the interests of improved curriculum, democratically developed.

In most cases, each data source gives two or more purposes for curriculum planning, with a different focus for each. For example, Schwab offers planning purposes that pertain to the learner, the school, and the curriculum. Macdonald and Purpel give purposes for each of the

focuses in this phase of the research - the learner, the society, the school and the curriculum, and the planning process itself.

The simultaneous articulation of purposes having educationally beneficial consequences for students, their society, and so on, suggests that not only do curriculum researchers consider each a significant object of the curriculum planning process, but that these objects of planning are related and interactive components of curriculum, deserving attention in the curriculum process.

The purposes extracted from the major data sources of this study were classified according to the object or major focus of the purpose. Multiple purpose statements about the ultimate benefits desired for the learner are identified by data sources. Some speak of educational benefits to the society, the curriculum, and the planning process and its participants. It appears that, theoretically, curriculum planning is considered a rational process of modifying an existing program or creating a new one. It also appears that curriculum planning pursues multiple purposes or expressions of long-term educational benefits intended for students, society, the school and the program, and the curriculum planning

process and its participants. The classification of curriculum planning purposes is summarized in Table 19.

Table 19

Classification of the Purposes of Curriculum Planning

Students	Society	School and Program	Planning Process
To facilitate productive membership in the culture.	To develop a shared set of consistent ideas and values.	To provide for sustained improvement of the school.	To stimulate learning on the part of curriculum planners.
To effect behavioral change.			
To improve knowledge attitudes and skills.	To influence the form and direction of society.	To maintain and improve the curriculum in response to identified problems and inadequacies.	To maximize the sharing of values, expertise, and biographies.
To develop self-directed continuous learners.	To nourish a good and democratic society.		
To foster human liberation.		To embody transcendent reality in its cultural and spiritual meanings.	
To develop good persons.			
		To reconstruct knowledge and experience for educational purposes.	
To enhance control of knowledge and experience throughout life.			
		To transform educational images into effective education programs.	
To discipline youth in group ways of thinking and acting.			

(table continues)

Students	Society	School and Program	Planning Process
To prepare students for the activities of adult life.		To improve the structure and documents of the curriculum.	
To produce valid and justifiable learnings.		To conduct inquiry, criticism, research and evaluation.	
		To solve curriculum problems.	
		To keep the curriculum up to date.	

Elements of Planning

An examination of the 54 items that emerge from the major data sources as elements of curriculum planning suggests that numerous categorical schemata are possible. The items were sorted until a set of categories emerged that included all of the elements. The criteria described in chapter 2 were applied - sufficiency of empirical evidence, generative powers, significance, power to convey meaning, originality, logical consist-

ency, and mutual exclusiveness. The following categories were chosen: philosophy of education, intentions (goals and objectives), content selection and organization, selection and organization of learning opportunities and activities, evaluation, anticipation of instruction, deliberation, data gathering and analysis, formative evaluation. Each of these categories of elements can be divided into two major groups - content elements and process elements. Each of these groupings and their subcategories of elements are discussed below.

Content Elements

The categories of content elements are philosophy of education, intentions (goals and objectives), content selection and organization, selection and organization of learning opportunities and activities, evaluation, and anticipation of instruction.

Philosophy of education is the first content element category. This category includes the fundamental assumptions, values, and beliefs that support the educational enterprise and give it general direction. When written, philosophical statements often contain the broad aims or purposes of education within the jurisdiction of the planning authority.

Intentions is the second category of content elements. Included in this category are aims and purposes and goals and objectives. Aims and purposes are used synonymously in referring to the most general statements of value held for an educational enterprise or program. There is less agreement among data sources on the usage and meaning of goals and objectives. One data source uses objectives to refer to very precise statements of intention and goals to refer to statements of intention midway in generality between aims and objectives. Four of the data sources make no such distinction: they use objectives to refer to all levels of educational intention. Despite these distinctions, there is consensus among data sources that decision on intentions (i.e., long-range goals and short-term objectives) is a content element in curriculum planning.

Content selection and organization is the third category of content elements that emerged through data classification. It refers to selection of concepts, dispositions, processes, and skills to be presented for learning. Some data sources prefer the term subject matter to content: both terms are often used synonymously.

Selection and organization of learning opportuni-

ities is the fourth content element category. It refers to planned educational engagements and events. Data sources use various terms to refer to such engagements, but those mainly used are learning experiences, learning activities, and learning opportunities. All such statements by data sources are included in this category. Several data sources refer to both the selection and organization of content and selection and organization of activities as curriculum designing. Curriculum design statements are included in both of the above categories.

Evaluation is the fifth content element category. It refers to the planning of an evaluation program to assess the total effects of the educational program. This category includes statements from data sources on planning the evaluation of student learning, teaching, and the program as a whole, in terms of both intended and unintended outcomes.

Anticipating instruction is the sixth content element category. This category refers to planning at the curriculum formulation stage that considers suitable learning modalities for achieving curricular intentions and appropriate models of teaching. This category also includes planning considerations pertaining to individualization, the effects of the implicit (unstructured)

curriculum, and the improvement of teaching and learning.

Process Elements

The categories of process elements are data gathering and analysis, deliberation, and evaluation.

The data gathering and analysis category of process elements includes all data source statements on needs assessment, evaluation, and research.

Deliberation is the second major process category. It includes all decision-making processes referred to as consensus, or as much consensus as possible. Social-political decision-making is characteristic of group decision-making when members have real or imputed equality of status and power. It involves negotiation, persuasion, and influence. Dialogue is described as an interactive group process of decision-making that cuts across all phases of curriculum planning, the form and substance of which is in harmony with a public philosophical platform. Dialogical processes are characterized by sensitivity to personal dignity, diversity, and intellectual rigor. Decisions are arrived at by consensus, or as much consensus as possible. Interpretation, a phase in dialogical planning, involves curriculum planners in the open sharing of meanings, beliefs, values, and personal

biographies, in pursuit of understanding and consensual decisions and recommendations.

Deliberation is an interactive, collaborative group decision process that involves the consideration of curricular ends and means as mutually determining one another. Its aim is to determine the best course of action under the circumstances; this involves consideration of relevant facts, generating alternative solutions, and weighing the consequences of the alternatives.

Formative evaluation is the third category of process elements. It refers to the evaluation of tentatively selected materials and teaching methods at the developmental stage, when changes are still possible. It is distinct from the content element evaluation, which refers to the comprehensive evaluation of the total effects of a program. The classification of the elements of curriculum planning identified from major data sources is summarized in Table 20.

Curriculum Planners

An examination of the 69 items that emerge from the major data sources identifying participants in the

Table 20
Classification of the Elements of Curriculum Planning

Philosophy of Education	Contents Elements				Process Elements		
	Intentions	Content Selection and Organization	Selection and Organization of Learning Opportunities	Evaluation	Anticipation of Instruction	Data Gathering and Analysis	Formative Evaluation
philosophy platform	aims and objectives	choose design(s)	allotment and distribution of instructional time	evaluation curriculum effects	planning for implementation	analysis of adult activities	consensus decision making
preplanning (philosophy)	aims or intentions	culture content	experiences	evaluating curriculum and project	methods and organization	data gathering and analysis	dialogue
	curricular ends	curriculum means (materials and guides)	learning experiences	identifying evaluation means	modes of presentation and response	needs assessment	deliberation
	establishing aims or goals	curriculum designing	learning opportunities			planning	interpretation
	goals and objectives	deciding on designs	learning opportunities and organizing centers				social-political decision making
	goals and priorities	organization	organization				
	objectives	organization (scope, sequence, continuity, integration)	organization				
	purposes	planning	pupil activities and experiences				

(table continues)

curriculum planning process suggests that various categorizations are possible. An initial sorting identified 17 individuals and groups as curriculum planners: the federal government, state legislatures, state departments of education and state agencies, boards of education, district administrators, district consultants, specialists and resource people, principals, teachers, students, parents and other lay citizens, regional organizations, colleges and universities, educational laboratories, commercial publishers, test makers and testing agencies, community educators, and authors. An examination of this list indicates that subcategories are possible.

Further classification was undertaken on the basis of the participant's relationships with the curriculum planning process. The criteria of sufficiency of empirical evidence, generative powers, significance, power to convey meaning, originality, logical consistency, and mutual exclusiveness described in chapter two were applied. The following categories were selected: clients, users, legal authorities, metapanning system staff, and external experts and influential authorities.

Clients

Clients emerged from the classification of curric-

ulum planners as one subcategory. Included are parents, the current clients of the educational system, and other lay people, the past or future clients. These people were or will be customers of the educational enterprise - purchasers of educational services for their children.

Users

Users represent a second subcategory. Teachers are categorized as users of the curriculum, given their use of curriculum materials. Similarly, it seems reasonable to classify students as users, given that they are the ultimate receivers of the curriculum.

Legal Authorities

Legal authorities represent a third subcategory of planning participants. Included in this subcategory are the following: the federal government and its agencies; state legislatures; state departments and boards of education; state agencies; district school boards; district administrators and professional staff (superintendents, supervisors, educational planners, curriculum consultants and subject specialists); school principals. All have direct legal authority in primary and secondary education, except for the federal government, whose

authority is exercised more indirectly than directly. The authorities at the state, school district, and school building levels are potential administrators of the curriculum process - superintendents, administrators, supervisors, planners, consultants, and various other professional support staff.

The school principal plays a boundary role. He or she often functions as a receiver and user of preplanned curricula; however, given the principal's role as a line authority and the fact that she or he is the person responsible for the instructional practice of the school, the principal is judged to be a potential administrator of curriculum planning. For the purposes of this study, the principal is classified as a curriculum planner possessing legal authority. Review of data sources reveals considerable support for the view of the principal as occupying a key leadership and support role, given her or his comprehensive knowledge of the school milieu and his or her legal authority for decision-making.

Metaplanning System Staff

A fourth subcategory of curriculum planners includes those who are given ultimate responsibility for

administering the curriculum process. Major data sources refer to these individuals using various labels: directors of curriculum, curriculum specialists, and curriculum chairpersons. These leaders are generally appointed from within the group of administrators and are responsible for the organization and administration of structures, resources, and training necessary for effective planning. This subcategory of planners is referred to as the metapanning system staff.

External Experts and Influential Authorities

The fifth and final subcategory of curriculum planners contains external experts and influential authorities. This subcategory includes two groups of planners, distinguished according to their primary area of influence, expertise or political strength. In the first group are colleges and universities, educational laboratories, scholars, specialists, commercial publishers, testing agencies, community educators, and authors. Curriculum planning authorities may engage any of these directly in curriculum development or solicit their expert advice. They are often the source of alternative curricula and curricular ideas. Included in the second group are various national and regional organiz-

ations, teacher associations and unions, and philanthropic foundations. Their participation often takes the form of political and economic influence. The chief characteristic of these external experts and influential authorities is the support they supply to the curriculum planning process.

The classification of curriculum planners identified from major data sources is summarized in Table 21.

Table 21

Classification of Curriculum Planners

Clients	Users	Legal Authorities	Metapanning System Staff	External Experts and Influential Authorities
parents lay citizens	teachers students	federal government agencies state legislatures state departments and boards of education district school boards district administrators and professional staff . superintendents . administrators . supervisors . planners . professional support staff school principals	directors of curriculum curriculum specialists curriculum planning chairpersons	colleges and university educational laboratories scholars specialists commercial publishers testing agencies community directors author national organizations regional organizations teacher organizations foundations

Contextual Influences

The 108 items that emerge from the major data sources as curricular sources and contextual influences were sorted until a set of categories emerged that included all the factors. The classification criteria sufficiency of empirical evidence, generative powers, significance, power to convey meaning, originality, logical consistency, and mutual exclusiveness were applied. Six categories were selected: history and philosophy, society, learners, knowledge, the school, and the planning process itself.

History and Philosophy

History and philosophy is further classified into three subcategories: the history of curriculum theory and practice; the educational philosophy (platform) of the planning authority (school, district, state, or nation); the personal philosophical platforms of the curriculum planners. Educational philosophy refers to the assumptions and values from which thoughts and perceptions about curriculum proceed.

The influence of the history of theory and practice is acknowledged by most data sources. Some discuss the

dominance of scientific assumptions in curriculum since the turn of the century, which is consistent with the general acceptance of scientific and technological paradigms throughout Western society. They contend that reliance on traditional, culturally-accepted processes means that more appropriate paradigms of planning are neglected. At the local school and district levels, the planning participants' experience with change and innovation often influences, negatively or positively, current initiatives in curriculum.

The philosophy of education of a state, district, or school provides the value base, the direction, and the parameters of curriculum processes. Educational philosophy is conceived of by data sources as either explicitly or implicitly expressing prior decisions on fundamental issues. Although an educational philosophy is subject to new knowledge and changing circumstances, it does provide relatively stable, long-range direction for a jurisdiction.

The third subcategory of historical and philosophical influences contains the personal platform of individual participants and the philosophical orientations of groups and organizations. According to the data sources, individual and organizational values and

beliefs about education affect curriculum theory and practice across the spectrum of curricular activity, from classroom decisions to policy and regulations at the level of state and national governments. These groups and individuals include special interest groups, professional associations, parent-teacher organizations, groups demanding curricular change, testing agencies, and critics of education. Some of these have already been classified as curriculum planners in the external expert and influential authority subcategory.

Society

As a category of factors, society is of such influence in curriculum planning that several data sources refer to society as a source of curriculum rather than as merely a contextual influence. Two subcategories emerge from the classification of social and cultural factors that affect curriculum planning: factors that influence the society as a whole and factors peculiar to the local community.

Influential societal factors of the first type are linked to society's fundamental nature: its social, cultural, and linguistic composition; its ideological, economic, and political character; its technological

sophistication; broad social and psychological realities that cause value shifts, life-style changes, and employment and career changes; the many barriers to personal and cultural fulfillment, such as war, violence, prejudice, and fear; social aspirations. Included in the second subcategory are the local manifestations of broad social and cultural trends, coupled with parochial traditions and mores, expectations, and a lack of consensus on educational objectives. All data sources view the nature and needs of society as a powerful influence on curriculum and its processes.

Learners

Learner needs, interests, and abilities is another major subcategory of contextual influences on curriculum planning. It refers to the psychological bases of the curriculum: knowledge and understanding of learner growth and development as a general phenomenon; the needs, interests, abilities, and aspirations of the population for whom the curriculum is being modified or formulated; knowledge of the learning process - how it occurs and how it can be facilitated. Data sources consistently identify knowledge of the learner and the learning process as critically influential factors in

curriculum planning, potentially determining selection, organization, placement, teaching, and evaluation.

Knowledge

Knowledge is another subcategory of influential factors affecting the curriculum planning process. Planners' understanding of the nature of knowledge and their beliefs about it influence content selection and how it is organized and taught. Factors in this subcategory are as follows: source of knowledge and acceptance of source authority; the roles of disciplined knowledge and practical knowledge in the curriculum; the organization and presentation of knowledge; changing views of knowledge. Two data sources draw attention to the perceived dominance of scientific and technical knowledge, resulting in the neglect of aesthetic and creative forms of knowledge.

School

School is another subcategory of contextual factors influencing the curriculum process. Classification of these factors resulted in two subcategories: the role of the school in society and the characteristics of the local school(s) served by the curriculum planning

process.

The role of the school in society subcategory contains the following: various expressions of societal expectations for the institution in the form of legislation directly or indirectly affecting the curriculum; various court decisions and legal interpretations; statements of educational philosophy and aims; policies and regulations of school boards, state departments of education, accrediting agencies, and other superior authorities; agreements made through collective bargaining between school boards and teachers.

Other powerful influences on the public perception of the role of the school include the following: professional development programs conducted by teacher organizations and other educator special interest groups; the direct lobbying conducted by these groups; curriculum research and evaluation; the development of curricular materials and programs by professional reformers, research and development centers, educational laboratories, textbook publishers, test makers, and testing agencies: various individual and group critics of education. Data sources identify legal requirements and professional knowledge and research as perhaps the major societal factors influencing the role of the school as an

institution and the planning of school curriculum.

The nature of the local school subcategory contains the characteristics of local schools that influence curriculum processes conducted either in or for a school(s). Included are the following factors: the organization and culture of the school, which affects teacher attitudes toward change and their willingness to cooperate in planning for change; the history of innovation and change in the school; the backgrounds and needs of students; the needs of the teachers; the characteristics of the present curriculum and the consequences of what is and what is not being taught (explicit, implicit, and null curricula); the culture of the classroom(s); the technical, professional, and leadership capabilities of teachers and administrators. Data sources identify the school (its legally defined and publicly perceived role as a social institution and the strengths and weaknesses of individual schools) as a significant category of contextual influences.

Planning Process

The planning process is the sixth category of factors identified from major data sources as potentially influential in curriculum planning. This category

includes factors peculiar to the process that can alter the relationships, conditions, and outcomes of curriculum planning. Seven process subcategories were identified: model or mode of planning; leadership; people and expertise; organization and deployment of personnel; group work climate; evaluation and research; the existence of an inservice education program.

The nature and outcomes of curriculum planning are affected by the models, or modes, of planning employed in the curriculum process. These modes encompass kinds of planning - curriculum policy making, generic curriculum development, site-specific development; paradigms of planning - e.g., the theoretical versus the practical; approaches to planning - e.g., the structured committee approach versus the problem-solving approach, the eclectic approach.

Other more specific considerations pertaining to curriculum planning advocated by data sources include the following: the need to attend to identified problems of students and teachers; the need to change the existing curriculum and practices incrementally, retaining what remains valuable and useful; the need to anticipate the implementation (instruction) of the curriculum, to facilitate use that is faithful to the best of planning

intentions.

The subcategory leadership contains factors that influence process effectiveness. According to the data sources, these factors are as follows: the general direction and support provided by the authority responsible for initiating and maintaining the curriculum planning process; the distribution of good leaders throughout the curriculum committee network; the knowledge, skill, and experience of curriculum leaders. Data sources consistently advocate the need for curriculum leaders to possess extensive knowledge, skill, and experience in the disciplines, curriculum development processes, human relations and group dynamics, and the arts of rhetoric, persuasion, and communication.

The subcategory people and expertise contains statements on who should participate in the planning process and the talent and expertise needed for the task. Different participants make different contributions and influence the process to varying degrees. Factors in this subcategory are representative of affected interests and the engagement of talent and expertise required for the various tasks. Data sources are highly consistent in their support of teacher, student, and public participation, and there is considerable support for involving a

broad spectrum of interests, competencies, and perspectives.

The subcategory organization and deployment of personnel contains factors relating to organizational structures, the size and composition of planning committees, and the differentiation and sequence of tasks. These factors are as follows: the roles of participants, the distribution of competencies, and the facilitation of effective communication. All data sources recognize that various factors of organization and deployment influence the curriculum planning process.

The subcategory group work climate includes factors that relate to human relations and group dynamics. It is recognized that the work climate affects group decision-making. The personalities of the participants, principles governing the form and substance of deliberation, and the attitudes of participants toward one another are the climate factors identified by data sources.

The subcategory evaluation and research includes factors related to needs assessment, societal study, study of the learners, diagnosis of curricular weaknesses, trial and experimentation with respect to potential learning materials, and the summative evaluation of the total curriculum program and its elements. There is

considerable support in the data sources for a comprehensive formative and summative evaluation program, coupled with ongoing research that employs a variety of evaluative tools and techniques to supply up-to-date information for curriculum decisions.

The subcategory inservice education contains factors related to the diffusion of curricular ideas and materials. Data sources are unanimous in their perception of the need for on-the-job education for those who will use the new curricula. Data sources generally view curriculum change as requiring "people change"; that is, a change in knowledge, attitudes, and skills.

There is no agreement among data sources about how best to provide inservice education. Some advocate widespread teacher involvement in the curriculum development process; others recommend that representative group(s) do the planning and that mass inservice follow development. In any case, inservice education is considered by data sources to be necessary because of its potential for influencing the success of the planning process. Inservice must be planned for during the formulation stage of curriculum.

In summary, curricular sources and contextual influences on the curriculum planning process are class-

ified into six categories: history and philosophy, the nature and needs of the society, the nature and needs of the learners and knowledge of the learning process, understandings and beliefs about the nature of knowledge, the role of the school, and the nature of the planning process itself. Each of these categories contain multiple factors that influence both the process and the outcomes of curriculum planning. The classification of the contextual factors that influence curriculum planning is summarized in Table 22.

Table 22
Classification of Categorization of Contextual Influences on Curriculum Planning

History and Philosophy	Nature of Society	Nature of Learners and Learning	Nature of Knowledge	Role of the School	Nature of the Planning Process
historical and cultural context of planning	broad social and psychological realities in the culture	data on nature of learners (learners in general and particular groups)	conventional wisdom	societal conception of the role of the school	model or mode of planning being used
history of curriculum field	social and cultural forces in society at large	apparent needs of learner population	conceptions of the nature of knowledge	legislatures	anticipatory generation of alternative solutions
normative theory of curriculum	civil interests	client perceived needs and wants	changes in knowledge and subject matter	courts	curriculum development sequence: inductive or deductive
descriptive theory of curriculum	trends and issues affecting curriculum	diverse student ability levels	current social science knowledge	school boards	nature of planning process employed
prior decisions on fundamental issues	barriers to personal and cultural fulfillment: injustice, war, poverty, etc.	psychology of learning	data on accumulated knowledge	legal requirements	quality of curriculum leadership by local profession
values		learner	funded knowledge	prior decisions of other levels of planning	leadership of support and professional staff
educational philosophy of the school	social change: political, economic, values	learners' needs, interests, abilities	knowledge	accrediting agencies	
philosophical foundations of the curriculum	demands of society and culture	new knowledge of the learner and the learning process	nature of knowledge	the characteristics of the local school	leadership of principal
platform	data on society		nature of subject matter	social organization of the school	leadership roles and skills

(table continues)

History and Philosophy	Nature of Society	Nature of Learners and Learning	Nature of Knowledge	Role of the School	Nature of the Planning Process
ideological assumptions and aspirations	localisms - social and cultural realities	psychological bases of the curriculum: • learners' growth and development • individual differences in learners • understanding of the learning process		apparent needs of the teachers	school department chairpersons
conflicting educational theories	influential individuals and organizations			students' background and culture	talent and expertise engaged
existing conceptions of teaching and learning	groups demanding curriculum change			classroom culture	professional knowledge
definition of curriculum	special interest groups			curriculum problems in the local school or district	external and internal influences on planners
developer's platform: • aesthetic qualities • political qualities • ethical qualities • moral qualities • transcendental qualities • historical qualities	professional associations professional interests of teachers and administrators parent-teacher organizations			curricular influences	deployment of expertise teacher involvement
attitudes of planning group to scholarly materials	critics of education			explicit curriculum implicit curriculum null curriculum	parent involvement subject specialists involved abilities of participants
				professionalism of teachers and administration	assistance of specialized groups size and composition of planning groups

(table continues)

History and Philosophy	Nature of Society	Nature of Learners and Learning	Nature of Knowledge	Role of the School	Nature of the Planning Process
curriculum orientation:	testing agencies			the existing manifest curriculum	differentiation of tasks
• technology	division in community on educational objectives			quality of local teaching profession	organization of personnel
• cognitive processes					group work climate
• academic rationalism	social and cultural forces in immediate community				personalities of planners
• personal relevance	community expectations				existence of a school-based inservice program
• social adaptation	life outside school				diffusion of curricular ideas
• social reconstruction					pace of change
accumulated lore of practical curriculum experience					quality of planning
					research
					technological feasibility data
					curriculum assessment
					formative evaluation of tentatively selected materials

Mode of Curriculum Planning

The 259 statements on how curriculum planning occurs were sorted until a set of categories emerged that included all factors. The classification criteria sufficiency of empirical evidence, generative powers, significance, power to convey meaning, originality, logical consistency, and mutual exclusiveness were applied. The following four categories were selected: phases, approaches, processes, and leadership.

Phases

According to the data sources, comprehensive curriculum planning consists of five principal phases: the metaplanning phase, the study phase, the creating phase, the implementing phase, and the evaluating phase. Since the focus of this study is the formulation of curriculum, the implementation and evaluation phases are not treated, except insofar as these phases are anticipated during the formulation stage.

Metapanning phase.

The metapanning phase refers to the period of pre-planning in which decisions are made about the personnel, organizational structures, specialized knowledge, skills, and logistics required to modify or formulate a curriculum. In this phase, planners envision the process as a whole and put in place the means of administering and evaluating curriculum planning.

Study phase.

The study phase refers to the period of comprehensive exploration, research, reflection, and deliberation conducted before decisions on content and learning opportunities are made. This phase establishes the philosophical platform of educational values and beliefs that animate and guide the curriculum processes. It encompasses the investigation of the society and the culture, the learners and the learning process, the nature of knowledge, the needs of teachers and teaching, and the role of the school. It includes an examination of the strengths and weaknesses of existing educational programs, their effects, and planners' desires for future graduates. In this phase, purposes and values are discussed, and the philosophical compass used to guide

subsequent planning is evolved. The data sources unanimously acknowledge the existence of a study phase in curriculum planning and the role of the resulting theoretical platform.

Creating phase.

The creating phase category of mode of planning statements includes statements on curriculum design and development, including planning for evaluation and the anticipation of curriculum implementation and instruction. During this phase, decisions are made about curricular goals and objectives, content, learning opportunities, evaluation techniques, and appropriate modes of teaching and learning; these curricular elements are creatively forged into an integrated plan for learning.

Approaches

An examination of the category approaches reveals that curriculum planning is a result of four major decision-making approaches: deductive, inductive, interactive (organic), and practical, or evolutionary, planning.

Deductive.

The deductive approach essentially proceeds from the general to the specific, from philosophy and aims through content to decisions on illustrative and specific learning opportunities.

Inductive.

The inductive approach proceeds in the opposite direction; curricula are designed to address specific teaching and learning problems. Instructional units multiply from the grassroots up, eventually making up a comprehensive curriculum framework.

Interactive.

Interactive, or organic, approaches focus on the curricular elements, not linearly as separate and distinct entities, but as organic, interactive, and interdependent phenomena arising out of the education process.

Practical.

The practical (evolutionary) approach does not focus attention on the curricular elements as much as on the collaborative group process of deliberation, out of which

curriculum decisions and recommendations evolve. The focus is on the specific situation and specific problems, and careful consideration is made of a variety of courses of action. Action is determined in the light of specific, factual knowledge about the situation and whatever can be found that aids in understanding and interpreting that situation. The merits of competing theories are weighed in terms of applicability and usefulness. This is all accomplished through deliberation by planners, much as a jury deliberates upon a verdict once the evidence is in.

Processes

The category processes is closely related to that of planning approaches, referring specifically to how curriculum planning decisions are arrived at. The classification of decision processes resulted in the emergence of five subcategories: logical derivation and evaluation, hypothesis testing and correction, sustained deliberation, data gathering and analysis, and formative evaluation.

Logical derivation and evaluation processes are

generally associated with deductive curriculum planning. Hypothesis testing and correction processes are integral to inductive and interactive (organic) approaches. Dialogical and deliberative processes are characteristic of practical, evolutionary planning. Data gathering and analysis and the formative evaluation of tentative curriculum materials and decisions are employed in all curriculum planning - deductive, inductive, interactive, and deliberative.

Most of the data sources discuss data gathering and analysis in relation to the diagnostic, or study, phase of curriculum planning. The importance of up-to-date information at all stages is universally recognized, establishing data gathering and analysis as an integral process of curriculum planning, whatever the approach. Also, the formative evaluation of tentatively selected curriculum, whether of content samples, learning activities, or evaluation tools and procedures, is considered a necessary process in curriculum planning by all data sources. All advocate some form of trial and experimentation for curriculum artifacts and procedures before their official adoption for use in instruction.

The eclectic application of planning approaches and decision processes is also advocated. This appears both

both logical and necessary, given the complexity, inter-relatedness, and cultural sensitivity of curriculum and curriculum planning. The inevitability of the various philosophical, policy, legislative, and regulatory constraints affecting curriculum require that rational, deductive processes be used to determine curriculum specifics appropriate to general theoretical platforms. Specific day-to-day problems and unanticipated situations necessitate responsive, inductive, experimental processes that address the particularities of teaching and learning situations. The interrelatedness of curricular ends and means also render strictly linear approaches unsatisfactory; holistic, organic consideration of the curriculum elements, to complement the logical, step-by-step process is necessary.

According to the data sources, because of the immense complexity of curricular phenomena and the magnitude of the consequences of curricular decision-making, group decision-making is preferable to planning by a single individual. The planning process requires a diversity of talent and expertise, representative of significant interests. All data sources consider curriculum planning a group undertaking, involving dialogical-deliberative decision processes. Dialogue and

deliberation are not peculiar to any one planning approach; they obtain in all curriculum planning. Also, a combination of deductive, inductive, interactive, and collaborative approaches and processes is necessary for effective curriculum development.

Leadership

Leadership refers to the function of facilitating planning process effectiveness. The classification of leadership factors resulted in the emergence of five subcategories: organization and deployment of personnel, climate, communication, strategies, leadership competencies.

Organization and deployment of personnel.

The subcategory organization and deployment of personnel includes the administrative factors pertaining to structures and curriculum planning roles. The curriculum leader(s) organize the work force, fix responsibility for the various parts of the planning operation, and deploy multiple leadership roles throughout the curriculum project, as needed.

Organizational structures identified by data sources include central steering committees, departmental committees, grade level committees, lay advisory committees, and ad hoc (working) committees. One data source advocated the establishment of a center for curriculum development and research, responsible for development of the overall curriculum. Most data sources, however, favor site-specific planning, the specific site being the individual school.

Roles of curriculum planners described by data sources include those of the superintendent, supervisors-coordinators, principals, teachers, students, and lay persons. The superintendent formulates general professional plans and policies, solicits school board and public support, interprets curricular change to the school board, establishes broad organizational structures, recruits key curriculum development personnel, and encourages curriculum developers.

Supervisors and coordinators generate new ideas, provide advice on curriculum trends, assist with staff development, encourage and trouble shoot, and generally function as resource people for curriculum planners.

The principal's knowledge of the local school is regarded as crucial to curriculum planning by several

data sources. A variety of other related administrative functions, such as recruiting personnel, orienting personnel, and providing inservice education, are considered important responsibilities of the principal.

Data sources are unanimous in their support of teacher involvement. Suggested teacher tasks include planning, implementing, and negotiating curriculum; planning course details and classroom activities; evaluation of curriculum materials; adaptation, experimentation, and research; providing leadership in four areas - the art of teaching, the disciplines, values, and social engineering.

Student participation in curriculum planning processes is generally favoured by data sources. Students should be consulted through interviews, questionnaires, and discussion; as well, they should serve as subjects of study, members of planning committees (depending on maturity), testers of materials, and experimenters with materials.

Lay persons are also viewed by data sources as necessary participants. Suggested roles include committee members, advisory council members, and resource people.

Miscellaneous organizational and development

suggestions made by data sources include the following: provide for both vertical and horizontal organization of curriculum processes; form working groups on the basis of task requirements; integrate many competencies into curriculum work teams; choose participants carefully, according to interest and ability; assign tasks to individuals and groups.

Climate.

The subcategory of leadership factors referred to as climate encompasses human relations and psychological considerations. Factors of climate that favorably influence curriculum planning include the following: attention to real teacher concerns; clear channels of communication; development of a collective focus; orientation of planners to development tasks; encouragement of planners by the curriculum leader(s). The nature of the deliberative decision-making process is considered critical to group morale and effective planning. The following are necessary to deliberation: the functioning of the curriculum leader as a countervailing force against domination of the process by one or several members, sensitivity to human dignity, recognition of member contribution, assured protection of individual

viewpoints, display of flexibility, encouragement of rigorous thinking, cultivation of natural leadership ability, participants' perception that they have the power to change things.

Communication.

The subcategory of leadership factors referred to as communication contains factors of communication and public relations identified by data sources as suitable for facilitating curriculum planning processes. One data source advocates the establishment of a committee on communications, to be overseen by one individual or a small group. Various guidelines for leaders are suggested, as follows: keep the communication unit small; keep messages brief, direct, and pointed; allow ample time for communication; employ both formal and informal channels; maintain communication between pilot groups and other teachers; maintain public relations with people and organizations outside the system. A key task of the curriculum leader is the removal of barriers to effective communication among curriculum planners.

Strategies.

Strategies refers to the potential planning

strategies available to curriculum leaders. Master planning, coordinated local planning, and planned programs of supervision are discussed. One data source advocates combining training for curriculum development with participation in the process of curriculum development, in which all teachers participate. In other words, training and development become one integral process. The planning strategies identified by most data sources are as follows: the formative evaluation of curriculum materials prior to acceptance for use in the curriculum, ongoing research and experimentation, and inservice education for potential users of the curriculum.

Leadership competencies.

The subcategory leadership competencies contains statements on the knowledge and abilities needed by curriculum leaders. Five subcategories of leadership competency statements were extracted from the data sources: technical knowledge, skills, and process competencies; knowledge of social and educational values; knowledge of human growth and development; knowledge of the intellectual disciplines; skill in human relations and group processes.

Technical knowledge, skill, and process competencies

identified by data sources relate to the diagnosis of curriculum problems, design and production, planning and organizing facilities and personnel, research and evaluation, and the application of deductive, inductive, interactive, and deliberative decision process, as appropriate. The initiation and guidance of deliberative decision making is viewed by several data sources as a critical leadership skill, requiring sensitivity and the skillful use of rhetorics of persuasion and elicitation, as well as experience in problemation and the arts of the eclectic.

Knowledge of social and educational values that support educational decisions is inclusive of moral, economic, social, and political values. Most data sources emphasize the need for curriculum leaders to understand democratic values, and all data sources emphasize the importance of the leader's knowledge of human growth and development. Miscellaneous leadership activities identified by data sources include surveying curriculum needs and conceptualizing the work; getting action started and establishing time limits for completion; providing planners with the necessary facilities, resources, and materials; and supervising and coordinating the work in progress.

The classification of curriculum planning mode statements is presented in Table 23.

Table 23

Classification of Statements on Curriculum Planning Mode

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
<u>Metapanning</u> Anticipating the future Conceptualizing the work Establishing criteria for what is to be done Helping planners see what is important Getting action started Establishing time limits Providing the necessary time, resources and materials Choosing the leader(s) of curriculum planning Providing for organization of personnel Engineering the production, implementation, and evaluation of curriculum	<u>Deductive</u> Investigate the sources of objectives. Screen objectives. State objectives, indicating behavior and context. Select learning experiences. Organize learning experiences. Choose overall structure of curriculum. Evaluate and revise. Decision on objectives Decision on learning experiences Decision on evaluation procedures Formulation of aims (societal level) Development of general objectives (institutional level) Selection of illustrative learning opportunities (institutional level) Delineation of precise behavioral objectives (instructional level) Selection of organizing centers	<u>Logical Derivation and Evaluation</u> Logical derivation and evaluation of curriculum substance Interpretation from level to level <u>Hypothesis Testing and Correction</u> Inductive five-step sequence Social-political transactions within levels, between levels, and between levels and the milieu Decisions are made on curriculum objectives, subject matter (content and process), methods and organization, and evaluation, not linearly as separate and distinct entities, but as organic, interactive, interdependent phenomena, arising out of the education process. Consideration is given to the various interactive curriculum sources and forces:	<u>Organization and Deployment of Personnel</u> Deploy multiple leadership roles with expertise in curriculum production and group processes. Organize at multiple levels: national, state, school district, building, teacher, and outside the school structure. Fix responsibility for subparts of the planning operation. Select development team. Organize the work force. Provide strong individual leadership in planning groups. Leadership conceived as a functional role of a group member Identifying and assigning personnel Central steering committee(s) Through a centrally coordinated approach serving both the individual school and the whole system System-wide faculty organizations There should be a curriculum advisory council to the faculty
<u>Study</u> Surveying curriculum needs Diagnostic study of the school community situation to ascertain the constellation of forces that maintain the existing curriculum The sharing of individual			

(table continues)

Mode of Curriculum Planning

Phases	Approaches	Processes	Leadership
meanings of planners The study of the effects of curriculum upon students and their predecessors Examination of group's vision of desired future graduates - "the best student grown" Making and evaluating proposals Identifying and defining problems Investigating the sources of objectives: learners, society, subject specialists Identification of objectives by analyzing adult activities Confrontation of purpose and value questions <u>Creating</u> Deciding on design(s) Screen objectives through psychology of learning. Screen objectives through educational philosophy. State objectives indicating behavior and context. Select learning experiences according to explicit criteria.	Statement of intentions Selection of content Transformation of goals and content into learning opportunities Organization of learning opportunities Selection of presentation and response modalities Evaluation of curriculum teaching and learning Validation of educational objectives Selection of subject matter Sequencing of subject matter and grade placement The allotment and distribution of instructional time Altering the existing curriculum Setting major goals, domains and objectives Design and write a curriculum plan or plans consistent with major goals, domains and objectives Anticipate curriculum implementation (instruction) Plan curriculum evaluation,	conflicting educational theories, studies of contemporary society, studies of the nature and needs of the learner, and the nature of knowledge Rational and systematic - an hypothesis-testing-correction cycle that is continuous and occurs at all levels, guided by the compass of the philosophy of education which leads to curriculum synthesis or an holistic view of what the school can and should do Curricular objectives arise from the educative process and should be tested by the process Social engineering (a form of action - research. A cycle of planning, action and evaluation that is repeated as often as necessary to achieve change objectives) A systematic four-phase process as follows: . Study to ascertain the con-	and administration. School-wide planning council Department committees Grade level committees Lay advisory committees Working ad hoc committees Ad hoc committees formed for a specific purpose Ad hoc committees attend to pressing concerns Ad hoc committee membership based on competence and interest Establish a center for curriculum development and research: . to be responsible for developing the overall curriculum . to mobilize human resources and administer planning . to plan and conduct teacher in-service . to construct evaluation instruments . to support a pool of suggested learning experiences . to develop curriculum syllabi and teachers' manuals . to suggest and try out procedures for learning experiences

(table continues)

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
Organize learning experiences vertically (continuous, sequential).	both formative and summative Identification of objectives Determination of student activities and experiences for pursuing objectives	stetlation of forces that maintain the existing curriculum Induction of change in the existing equilibrium	The local school-community should be the dynamic factor in curriculum change
Organize learning experiences horizontally (integration).	Organizing objectives and activities into a program of general education	Control of the various forces to effect change	Organize superintendent and professional staff to formulate the most general professional plans and policies
Choose overall structure of the curriculum.	Surveying the scene Assessing needs Identifying and defining problems	Establishment of a new constellation of forces to sustain the new curriculum	Suggested tasks for superintendent: Lend active support. Facilitate participation. Aid communication. Encourage efficient problem-solving.
Produce pilot units: diagnose needs, formulate objectives, select content, organize content, select learning experiences, organize learning experiences, evaluate, check for balance and sequence	Making and evaluating proposals Preparing designs Organizing the work force Supervising the planning process	<u>Dialogical and Deliberative</u> Participant observation (Planners become directly involved through ongoing programs or experimental pilot programs) Interpretation (Planners share individual meanings and personal biographies in arriving at decisions and recommendations) Dialogue and consensus (or as much consensus as possible) Guidelines for the substance of dialogue: congruence between dialogue and values of the framework or platform	Interpret program revisions to school board. Establish the organization. Seek funds, personnel and materials. Suggested role for supervisors and coordinators: Encourage and trouble shoot. Advise on curriculum trends. Generate new ideas. Actively assist school and teachers in curriculum development.
Test pilot units. Revise and consolidate pilot units.	<u>Inductive</u> Experimental production of teaching-learning units Testing of teaching-learning units Revision and consolidation		Assist with staff development. Central office supervisors Consultants used as resource
Develop curriculum framework. Combine curriculum development and training for curriculum development into one integral process.			
Choose objectives and content: consider contextual influences, state objectives for student behavior (feeling, thinking, and acting) in operational			

(table continues)

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
terms. Decide on learning experiences Develop general objectives (institutional level) Delineate precise behavioral objectives (instructional level). Select organizing centers (instructional level). Select illustrative learning opportunities (institutional level). Transform goals and content into learning opportunities. State intentions: goals, objectives. Select content. Organize learning opportunities. Select modalities of presentation and response. Select subject matter. Sequence of subject matter and grade placement. Allocate and distribution of time. Identify institutional goals and domains. Design and write a curriculum plan consistent with major	Development of the overall curriculum design Installation and dissemination <u>Interactive</u> Decisions are made on curriculum objectives, subject matter, methods and organization, and evaluation, not linearly as separate and distinct entities, but as organic, interactive, interdependent phenomena, arising out of the education process. Consideration is given to various interactive curriculum sources and forces - conflicting educational theories, studies of contemporary society, studies of the nature and needs of the learner, and the nature knowledge. How the curriculum sources are drawn upon and the nature and extent of their influence is determined by educational philosophy. Curricular objectives arise from the educative process and are	- substance should involve dialectical consideration of the abstract and the concrete, the individual and the group, the relations between the educational setting and society and culture, and between the ideal and the actual. Guidelines for the form of dialogue: - intellectually rigorous - free-flowing imagination - aesthetic sensibility - personally nonjudgmental - celebrate diversity - sensitive to personal dignity - need to reflect values of the platform Decide among competing curriculum selections through deliberation Generate alternative curriculum selections through the process of deliberation By means of group deliberation concerning ends and means,	people rather than as agents of change Suggested roles for principals: - Support program change. - Arrange work loads. - Encourage teacher evaluation. - Facilitate inservice. - Provide teacher orientation. - Recruit able teachers. Organize principals to plan curriculum for several buildings. Teachers participate in planning, implementing, and negotiating curriculum Leadership should be provided by the local profession in four areas: art of teaching disciplines, values and social engineering Organize teachers to plan course details and classroom activities Suggested teacher tasks: - Serving on grade level committees - Serving on departmental committees - Trial and evaluation of materials - conducting surveys - serving on committees

(table continues)

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
goals and objectives: consider basic factors relating to the major goal and domain; identify the subgoals of the domain; identify possible types of learning opportunities; settle on appropriate curriculum design; prepare tentative design specifications; identify requirements for implementation. Anticipate curriculum implementation (instruction): consider ways to improve practice; suggest appropriate teaching models; anticipate how to deal with individualization and the effects of the "unstudied curriculum". Organize objectives and student activities into a program of general education. Determine student activities and experiences for pursuing objectives. Consider questions of sequence, integration and local adaptation throughout the development process.	tested by that process. <u>Practical (Evolutionary)</u> Data gathering and analysis Participant observation Interpretation <u>Eclectic</u> Structured committee, interactive, problem-solving	relevant facts, alternatives and consequences, and the best course of action to Deliberation (consideration of the purport, originating disciplines of each curriculum selection, and the weighing of incommensurables) Sharing of beliefs Sustained deliberation Through collective decision-making There should be a minimum of restraint upon points of view, ideas, and information exchange. <u>Common Processes</u> Data gathering and analysis to gain historical and theoretical perspective on the particular issue in relation to the platform Extensive field testing Hothouse trials Writing and critiquing Formative evaluation of tentatively accepted curriculum selections to assist in discovery of their potential	- Other duties as needed - Teachers actively involved in curriculum adaptation, experimentation, and research - Suggested tasks for pupils: - conducting surveys - serving on committees - working for committees - trying out tests and materials - Serving as subjects of study - consultation (sit in on planning groups if sufficiently mature) - Community participates through advisory councils, committees, meetings, surveys, etc. - Suggested roles for lay persons: - resource people - members of citizen advisory committee - members of school lay cabinet - Community-wide participation in the curriculum process - Start small involving only a few people at first - Combine curriculum development and training for curriculum development into one integral process. - Rotate individuals and work

(table continues)

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
Decide on evaluation procedures to assess student learning, curriculum effectiveness and trial of the new curriculum with sample(s) of students and teachers Preparing designs Plan for implementation. Check for vertical and horizontal articulation of goals and culture content. Choose overall structure of curriculum. Select a curriculum design and write the curriculum. Develop curriculum framework. Organize content. Organize learning opportunities. Set major goals, domains and objectives through basic data analysis. Curricular objectives should arise from the educative process and should be tested by the process. Formulate objectives. Discover curriculum potential: generate alternative curriculum possibilities;		Formative evaluation involves the evaluator and the classroom teacher in an alert watch of student action and reaction when materials are being tested in the classroom. Formative evaluation pays special attention to the unanticipated responses of students when materials are being tested. Formative evaluation findings are reported to the planning group through demonstration classes and written reports.	groups. Assign tasks to individuals and groups. Logistical concerns: • extent of member's involvement • size of groups Choose participants carefully, according to interest and ability. Employ a developmental strategy of selective heterogeneous participation. Open participation Maximum size of work group: 15 Integrate many competencies into the work team. Responsible representation on committees. Starting point: anywhere Form work groups on the basis of job requirements There should be both vertical and horizontal organization of personnel to facilitate communication and collaboration. Competent curriculum developers
			<u>Climate</u> The chairman functions as a

(table continues)

Mode of Curriculum Planning			
Phases	Approaches	Processes	Leadership
decide among the competing selections. Decide on evaluation procedures to assess student learning and curriculum effectiveness with samples of students and teachers. State intentions: aims, goals, objectives (behavioral, problem solving, expressive). <u>Implementing</u> Conducted by the curriculum engineering system responsible for production, implementation, and evaluation of curriculum Consider program implementation in the planning phase Disseminate information about the project at various stages, using diverse means. Inservice teachers who will be using the materials Install and disseminate curriculum. Phase three: anticipate curriculum implementation.			countervailing force against domination of the process by one or several members. Chairperson encourages participants to do the job well Perception of power to change things on the part of participants Maintain climate for productive work: . Develop collective focus. . Maintain clear channels of communication. . Cultivate and distribute natural leadership ability. . Assure protection of individual viewpoints. . Keep group composition and mode of work flexible. . Conduct deliberations in a permissive atmosphere. Apply knowledge of psychological and human factors. Give credit to planners. Attend to live instructional problems of teachers. Start with the concerns of teachers. Provide orientation to the project.

(table continues)

<u>Mode of Curriculum Planning</u>		
Phases	Approaches	Processes
Phase two: systematic social engineering process - - Induction of change in the existing equilibrium to loosen the constellation of forces <u>Evaluating</u> Phase four: planning curriculum evaluation (formative and summative) encompassing the total program, various segments of it, instruction, and the program of evaluation itself Evaluation of curriculum, teaching, and learning Evaluative criteria: - educational significance - developmental appropriateness - suitability to students' background and interests - diversity of modes of presentation - quality of teaching - outcomes achieved Evaluate curriculum. Apply evaluation means. Revise curriculum.		<u>Leadership</u> <u>Communication</u> - Keep communication unit small. - Keep messages brief, direct, and pointed. - Allow ample time for communication. - Employ both formal and informal channels. - Deliberations of the top are passed down the line as suggestions. - Deliberations of the bottom are passed up as suggestions. - Have one person or group watch over communications. - Maintain continual communication between pilot groups and the rest of the staff. - Maintain public relations with people and organizations outside the school system. - Disseminate information about the project at various stages using diverse means. - There should be a committee on communications to oversee communication of both information and perspectives.

(table continues)

<u>Mode of Curriculum Planning</u>			
Phases	Approaches	Processes	Leadership
		Facilitate communication. Make corrections, resulting in a shared vision and shared goals throughout the organization. The chairperson (curriculum specialist) tries to remove barriers to effective communication among group members.	
		<u>Strategies</u> Master planning Consolidated local planning Planned programs of supervision Hold planning sessions when needed. The chairperson instigates and monitors the process of formative evaluation. Arranging and guiding evaluation Experimentation and research The chairperson (curriculum specialist) arranges for the necessary research of curriculum problems. Combine curriculum development and training into one integral process. Inservice teachers who will use the materials Inservice education and staff	

(table continues)

<u>Mode of Curriculum Planning</u>			
Phases	Approaches	Processes	Leadership
			development The chairperson (curriculum specialist) instigates, administers, and chairs the process of developing curriculum embodiments. The chairperson (curriculum specialist) plays a key role in moving the group to effectiveness. Consider questions of sequence, integration and local adaptation throughout development. Consider program implementation in the planning phase.
			<u>Competencies</u> Leaders require expertise in the disciplines, curriculum development, and human relations Technical skills Ability to diagnose concerns Ability to develop programs and plans Ability to plan and organize facilities and personnel Ability to understand research processes Knowledge of curriculum

(table continues)

Phases	Mode of Curriculum Planning		
	Approaches	Processes	Leadership
			development The chairperson (curriculum specialist) instigates, administers, and chairs the process of developing curriculum embodiments. Technical skills in curriculum making Knowledge and ability to adhere to principles of human growth and development Knowledge of learners Knowledge of social and educational values that underlie educational decisions Understanding of democratic values Values Liberal acquaintance with academic fields from which school curricula are drawn The mastery of intellectual disciplines Expertise in the disciplines Understanding of the processes of educational engineering and human relations Expertise in human relations Knowledge of when, where, and under what circumstances to

(table continues)

<u>Mode of Curriculum Planning</u>		
Phases	Approaches	Processes
		Leadership
		change curriculum
		Ability to practice good human relations
		Knowledge and skill in human relations, social diagnosis, and communication
		Ability to mobilize groups
		Expertise in group processes
		Technical skills in curriculum making
		Knowledge and ability to adhere to principles of human growth and development
		Knowledge of learners
		other people
		Ability to use group process techniques
		Expertise in problemation, deliberation, and arts of the eclectic
		Skillful use of rhetorics of persuasion and elicitation
		Habit of reading learned journals

The classification phase of this study shows that curriculum planning is a rational, multipurpose, multi-task, multi-approach, eclectic decision-making process of curriculum formulation or modification. It is a group undertaking, involving various planners and authorities. It is subject to the continual influence of historical, theoretical, and social forces that make up the milieu, or context, in which planning occurs. Its effectiveness depends on the quality of the curriculum planning leadership available.

Summary

Two phases of the interpretative-theoretical methodology were presented in this chapter. The first section contained a descriptive analysis of the major data sources in relation to the five research questions posed for the study. The second section presented the classification phase of the methodology. Categories and relationships described in this section provide the components from which the theoretical model was constructed, in the final phase of the research.

In chapter 5, the explanatory phase of the inter-

pretative-theoretical methodology is described. This phase represents the culmination of the research in the development of a theoretical model of curriculum planning.

A summary of the major components of curriculum planning identified in the classification phase is presented in Table 24.

Table 24

A Summary of the Major Categories (Components) of Curriculum Planning Identified in the Classification Phase

Components of the Curriculum Planning Process				
Purposes	Elements	Planners	Contextual Influences	Mode of Planning
<u>Learner</u>	<u>Content</u>	<u>Clients</u>	<u>History and Philosophy</u>	<u>Phases</u>
Productive cultural membership	Philosophy of education and aims	Parents Lay citizens	History of curriculum theory and practice	Metapanning phase
Behavioral change	Intentions (goals and objectives)	<u>Users</u>	Educational philosophy of planning authority	Study phase
Improved knowledge, attitudes, skills	Content selection and organization	Teachers Students	Personal philosophical platforms of planners	Creating phase
Greater personal meaning in life	Selection and organization of learning opportunities			Implementing phase
Self-directedness - continuous learning	Evaluation	<u>Legal Authorities</u> Federal government and agencies	<u>Nature of Society</u> Society in general	Evaluating phase
Personal liberation from unnecessary constraints on human dignity and potential	Anticipating instruction	State legislatures State departments and boards of education	Local community	<u>Approaches</u> Deductive Inductive Interactive Practical
Personal morality	<u>Process</u> Data gathering and analysis	District school boards: • superintendents • administrators • supervisors	<u>Nature of Learner and Learning</u> Needs, interests, abilities and aspirations of the learners	<u>Processes</u> Logical derivation and evaluation
Improved control of knowledge and experience	Deliberation Formative evaluation of tentatively selected materials and procedures	• planners • professional support staff School principals	Planners' knowledge of human growth and development Planners' understanding	Hypothesis testing and correction Sustained deliberation Data gathering and analysis Formative evaluation
<u>Society</u>				
Shared set of ideas and values				
Improved social develop-				

Components of the Curriculum Planning Process			
Purposes	Elements	Planners	Contextual Influences
			Mode of Planning
ment		<u>Metaplanning System Staff</u>	<u>Leadership</u>
Nourishment of a "good" democratic society		Directors of curriculum	Organization and deployment of personnel
		Curriculum specialists	Climate
		Curriculum planning chairpersons	Communication Strategies
<u>School and Program</u>			Leadership competencies
Improvement in response to identified problems and inadequacies		<u>External Experts and Influential Authorities</u>	<u>Nature of Knowledge</u>
Programming that includes other knowledge reality apart from that known through the senses		Colleges and universities	Source and authority
Programming that provides for criticism, evaluation, research, and problem solving		Educational laboratories	Role of theoretical and practical knowledge in the curriculum
		Scholars	How to organize and present knowledge
		Specialists	Changing views of knowledge
		Commercial publishers	
		Testing agencies	<u>The Role of the School</u>
		Community educators	Legislation
		Authors	Court decisions
		National organizations	Statements of policy and aims
		Regional organizations	Regulations of boards, departments, etc.
		Teacher organizations	Nature of local school
		Foundations	
<u>Planning Process and Planners</u>			
Stimulate learning on the part of participants (planners).			
Maximize participation and the sharing of			

<u>Components of the Curriculum Planning Process</u>			
Purposes	Elements	Planners	Contextual Influences
values, biographies and expertise			<u>Planning Process Features</u> Mode of planning Leadership People involved Organization and deployment of personnel Group work climate Evaluation and research Inservice education
			Mode of Planning

CHAPTER V: EXPLANATION AND MODEL

Introduction

In the explanation phase of the interpretative-theoretical methodology, presented in this chapter, the categories of data that emerged from the exploration, description, and classification phases relative to the research questions (see Table 24), are incorporated into a theoretical model of curriculum planning.

The model depicts the progressive planning process of curriculum formulation or modification, implementation, and evaluation. The process occurs over time in several distinct, overlapping phases, employing several decision processes, in pursuit of a plurality of purposes defined as "ultimately desired educational benefits". The model demonstrates the influence of contextual factors impinging on the process and relations between the major planning phases.

This study concentrates on the formulation or modification of a curriculum, or the first three phases of the curriculum planning process identified during classification: metapanning, study, and creating (p. 292). These phases provide the organizing framework for model construction, and therefore are the focus of the first

section of this chapter. The second section discusses the functional components of planning: the major decision processes; the elements; the purposes of curriculum planning; and the participants, or planners. The third section deals with the context in which curriculum planning occurs. The final section of the chapter presents a description of the entire model.

Phases

The modification of an existing curriculum or the development of a totally new educational program requires metapanning, study, and the creation of an integrated phenomenon known as a curriculum. Figure 1 is a conceptualization of the phases and elements of the curriculum planning process. The focus of this study is on the first three phases, which make up the modification or formulation stage.

A spiral is employed to depict the progressive development of curriculum over time. The major planning phases are identified; the spiral suggests that the lines of demarcation between phases are not sharply defined but overlap. One phase gradually merges into another as

planning proceeds. The spiral also illustrates the significant role of metapanning in linking the phases and guiding the planning process.

Metapanning Phase

Curriculum modification or formulation requires both preplanning and planning in process. Figure 1 depicts metapanning both as a preplanning phase and as the ongoing provision of support and direction in all subsequent phases, or planning in process.

Metapanning is a managerial function; it serves to facilitate and direct the technical curriculum development processes of the several phases. It involves envisioning the curriculum development process; anticipating the organizational structures, specialized knowledge, skills, and logistics required; securing and deploying the various human and material resources; and initiating, supporting, directing, and evaluating the process of modifying or formulating a curriculum. Substantive metapanning decisions or elements, pertain to who should be involved; how planners should be organized to get the job done; human relations, group

dynamics, and communication; recruitment and deployment of desired group leadership and the inservice education of planners and users of the modified or newly formulated curriculum.

The relationship of metaplanning to the other phases is that all phases require metaplanning (i.e., pre-planning and planning in process), as depicted in Figure 1. The metaplanning phase and all subsequent phases are linked together and supported by metaplanning. Metaplanners proceed from the metaplanning phase to the study phase, from the study phase to the creating phase, and so on, anticipating, directing, and adjusting planning as curriculum development proceeds. Metaplanning is considered a continuous process that both preceeds and accompanies the technical curriculum development processes throughout all phases.

Study Phase

This is the first phase of technical curriculum planning. It involves comprehensive exploration, research, reflection, dialogue, and deliberation, leading to the articulation of a philosophical platform of

values, beliefs, and aims of education. The substantive decisions of this phase pertain to educational philosophy and aims. All data sources consulted consider these to be largely prior curriculum planning decisions. Content selection and organization are usually viewed as following the study phase.

Study is a universal feature of curriculum planning. Study is required for minor curriculum modification as well as for comprehensive curriculum development. Nevertheless, differences were found among data sources concerning the existence of a distinct study phase in the curriculum process. Those favoring deductive approaches, for example, generally view the development of philosophy and aims (the study phase) as the first step in curriculum planning; those favoring inductive and evolutionary approaches tend to regard educational philosophy and aims as contextual to the process, already established by the educational authority, and not necessarily an essential phase of curriculum planning. In the meantime, all data sources appear to accept the need for philosophical direction in curriculum, whether the development of such theoretical direction occurs as an integral part of the planning process or otherwise. In this study, the position taken

is that establishment of educational philosophy and aims in curriculum planning requires a major study phase following metaplanning and preceding the creation of an integrated curriculum program and its implementation and evaluation.

In the study phase, the attention of planners is focused on understanding the following: the learners' needs, interests, aspirations, and abilities; the processes of learning and teaching; learning environments and their effects; the effects of existing curricula; the needs, characteristics, and aspirations of the society in general and of the local community in particular; the role of the school. The personal platforms of values and beliefs of the individual curriculum planners are shared and scrutinized in the study phase. Such comprehensive study is undertaken to establish a comprehensive, integrated philosophy of education and of curriculum.

Three major decision processes - data gathering and analysis (research), group dialogue and deliberation, and formative evaluation - are integral to the study phase. The eclectic application of the other decision processes, logical derivation and evaluation and hypothesis testing and correction, may also occur. The key decision process in the study phase is group deliberation. Planners share

knowledge, individual meanings and values, and gradually and collaboratively evolve a conceptual philosophy of education and aims. Various tools and techniques of research and evaluation, as deemed appropriate and in keeping with espoused values, are used in the study phase.

Creating Phase

This is the innovative phase of curriculum planning, often referred to by data sources as curriculum design and development, curriculum construction, or curriculum formulation. Modifying or formulating curriculum involves the statement and concrete representation of broad philosophical principles and aims in the form of goals and specific learning objectives and the selection and organization of various material artifacts, suggested teaching and learning activities, and various evaluation activities and techniques. In this phase, all are creatively formed into an integrated whole - an organized, purposeful curriculum framework, capable of fostering learning supportive of the ideals that animate and guide education, and capable of generating the

ultimately desired benefits for learners envisioned in the study phase.

The substantive elements or decisions of the creating phase are as follows: statement of goals and objectives; selection and organization of content; selection and organization of learning opportunities and activities; identification of appropriate teaching and evaluation approaches, strategies, and activities; anticipation of how successful curriculum implementation and evaluation may be realized.

The available planning approaches and processes identified by data sources are as follows: deductive, inductive, interactive (organic), and practical, or evolutionary, curriculum planning. Corresponding decision processes identified by data sources are logical derivation and evaluation, hypothesis testing and correction, sustained dialogue - deliberation, data gathering and analysis, and formative evaluation. Planning comprehensive modification or formulation of curriculum requires the eclectic application of various approaches and decision processes. In other words, curriculum creation simultaneously involves deductive decision-making that proceeds from philosophy and aims, inductive decision-making that responds to real,

practical problems, and decision-making that is cognizant of the simultaneous, organic interaction of learner, society, and knowledge and of curricular ends and means. It is necessarily a collaborative group process.

The complex, value-laden, political character of curriculum and its potential to positively and negatively affect a myriad of interests means that curriculum creation cannot possibly be the product of a single mind. It is a social process of collaborative dialogue and deliberation, out of which consensual decisions and direction evolve.

Sustained deliberation is the key decision process of the creating phase. The other major decision processes are data gathering and analysis (or research) and formative evaluation. Formative evaluation is particularly useful in making final choices about content, learning materials, and teaching and evaluation processes and techniques. It involves the trial of tentatively selected materials and policies, prior to formal adoption for use.

Out of the creating phase, the educational program designed to help realize the ideals expressed in the study phase, emerge. The nature of teaching and learning in the subsequent phase, implementation, is also

directly influenced by the created curriculum. Also, the successful introduction of the created or modified curriculum and the evaluation of that curriculum is anticipated and planned for in the creating phase.

Functional Components

The purposes of planning, the decision processes, the elements (tasks), the planners (participants), and the quality of leadership available are integral and essential features of the curriculum planning process. All functionally interact to move curriculum development through the various phases toward creation and implementation. Figure 2 depicts the functional components of curriculum planning in relation to the planning phases explained in the first section.

Purposes

As a rational process of modification or formulation, curriculum planning characteristically pursues multiple purposes, or desired educational benefits for

the learner, the society, the school and the program, and the planning process and its participants.

Purposes are largely determined through meta-planning, the study of curriculum sources and influences, and the deliberate examination of the philosophical platforms of the planning authority and of individual participants in the planning process. Purposes give direction to curriculum modification or formulation, implementation, and evaluation. Data sources confirm the inevitability of a plurality of educational purposes in curriculum planning, whether explicitly stated or assumed.

Processes

Decision processes refer to how curriculum planning decisions are made. The five major processes, logical derivation and evaluation, hypothesis testing and correction, sustained deliberation, data gathering and analysis (research), and formative evaluation, are depicted in Figure 2 as occurring throughout all phases of curriculum planning. The implication is that curriculum planning cannot be limited to any one way of making decisions; it

requires an eclectic application of all decision processes available.

Curriculum planning, viewed as the eclectic application of several decisions processes (and by implication, several planning approaches), reflects the realities identified by data sources: the immense complexity of the process; the public significance and pervasive impact of curriculum decisions; the inevitability of value considerations; the inevitability of legislative, regulatory, and policy requirements for curriculum; the influence of the history of curriculum theory and practice; the demands of perplexing day-to-day practical problems. Such curriculum realities appear to defy reliance on a single approach or process for modifying or formulating a curriculum of public education. Instead, curriculum planning demands multiple approaches and processes and the involvement of diverse expertise and talent.

Logical derivation and evaluation processes are employed to identify specific learning objectives and opportunities that logically derive from aims, policy, and philosophy. Hypothesis testing and correction processes are often employed to clarify practical problems and to test for better solutions. Data

gathering and analysis (research) supplies pertinent information to guide decision making in all phases. Formative evaluation processes provide a preliminary assessment of ideas, processes, and materials before final adoption for use. The essential decision process however, given that curriculum modification or formulation is necessarily a social or group process, is deliberation. It is by means of collaborative dialogue and deliberation that consensual curriculum decisions and recommendations are evolved. Without deliberation, the other decision processes are ineffectual.

Elements

The elements or tasks of curriculum modification or formulation differ according to each phase. They have already been discussed under Phases, p. 325.

Planners

The process of modifying or formulating a curriculum, described earlier as a collaborative group process,

requires the participation of various categories of people and authorities: clients, users, legal authorities, metaplanning system staff, and external experts and influential authorities. All engage in two types of curriculum planning: metaplanning, or managerial planning, and technical planning.

Metaplanning refers to preplanning and the in-process planning and administration of the overall curriculum planning process. Metaplanning is conducted by, or under the auspices of, the authority having direct responsibility for curriculum development. The metaplanning system staff comprises directors of curriculum, curriculum specialists, or curriculum chairpersons and others appointed by the authority administering the process. Technical planning for curriculum formulation refers to the tasks, procedures, and processes involved in the study and creating phases of curriculum development. Although data sources draw a distinction between metaplanning and technical planning, the two are inseparable in practice. For some data sources, metaplanners and technical planners are different people; for other data sources, the same planners carry out both metaplanning and technical planning functions.

Curriculum planners have various relations to the

educational enterprise, and are categorized accordingly in this study. Parents and other lay citizens are categorized as clients of the educational system. Parents are the current customers who purchase educational services for their children. Other lay citizens include people who were clients in the past and others who will be clients in the future. They have a direct interest in curriculum decisions and are an important resource in the planning process. Suggested roles for lay people include membership on committees and advisory councils.

Teachers and students are the users of the curriculum. They have a direct and vested interest in curriculum modification or formulation. Suggested roles for teachers encompass all aspects of curriculum planning - managerial, technical, professional, and philosophical. The nature of student participation depends on their level of maturity. Recommended student responsibilities include consultation, participation in studies, and committee membership.

National and state governments and agencies, state legislatures, state departments and boards of education, district school boards and professional staffs, and school principals are categorized as curriculum planners

possessing legal authority in education. Representatives of the authorities, particularly from the state and district levels, participate directly in curriculum planning. All exercise policy and regulatory prerogatives that directly or indirectly influence curriculum planning of all types and at all levels.

Colleges and universities, educational laboratories, scholars, specialists, commercial publishers, testing agencies, community educators, authors, national organizations, regional organizations and foundations are categorized as external experts and influential authorities. They participate in the planning process by making personnel, expertise, research findings, and alternative curricula available. Some of them exert political and economic influence, which can dramatically affect curriculum processes.

Curriculum planning of all types and at all levels involves the participation of clients, users, legal authorities, external experts and influential authorities, and metaplanners. It is the metaplanners and technical planners, however, that expedite the processes of curriculum modification or formulation, contributing the vision and intellectual resources, identifying and organizing the personnel and material resources, and

utilizing the processes of research, deliberation, and formative evaluation to create and build curriculum.

Figure 2 depicts the curriculum planners as an essential component of the curriculum planning process. The rectangle of planners extends along the planning process spiral to suggest the continuous involvement and guidance given by planners. Without planners, there can be no planning process. The effectiveness of curriculum planning, however, is also directly related to the nature of the leadership available.

Leadership

Leadership refers to the function of facilitating and guiding the curriculum planning process. The importance of leadership in curriculum planning is depicted in Figure 2 by means of a rectangle that extends along the planning process spiral. This is intended to suggest that effective curriculum planning requires capable leadership throughout all its phases and at both the metapanning and technical planning levels.

Significant responsibilities of curriculum planning leaders include the following: the organization and deployment of personnel, the creation and maintenance of

a suitable work climate, the provision of effective communication, and the innovative use of various planning strategies. Comprehensive leadership skills must be supported by requisite knowledge and experience.

Organization and deployment of personnel refers to decision-making about organizational structures, planners' roles and responsibilities, and the mix of interests, talent, and expertise needed for the various planning tasks. Curriculum leaders must provide for both vertical and horizontal decision-making, innovatively tailoring committee structures - steering committees, grade level committees, subject committees, and ad hoc committees - to suit the need.

To foster a favorable work climate, psychological and human relations factors must be considered. Attention must also be given to the most fundamental of curriculum decision processes, namely group deliberation, and the essential principles governing that process. With reference to human relations, effective curriculum leaders focus attention on the actual problems of students and teachers, strive to establish a collective focus, maintain open channels of communication, and supply participants with task orientation and the necessary on-the-job education. Deliberative curriculum

decision-making is conducted in accordance with accepted standards of fairness and decency. The dignity of participants is preserved, individual viewpoints are protected, and planning is carried out in the knowledge of power to effect change.

Effective curriculum leaders strive to remove the barriers to communication among planners and to maintain good relations with people and organizations outside the curriculum project. Recommended ways of effecting better communications include the establishment of a communications committee that functions in accordance with proven guidelines on committee size, required time, and the use of formal and informal channels.

Planning strategies available to curriculum leaders are limited only by their own imaginations. Among those cited by data sources are the following: master planning, coordinated local planning, formative evaluation of curricular ideas and materials, research and experimentation, and the orientation and on-the-job education of curriculum planners, to equip them for the task.

The abilities required by curriculum leaders may be broadly labelled technical, valuational, and professional. Technical knowledge and skill pertain to all

aspects of designing and developing curriculum, including the planning and organizing of facilities and personnel, research and evaluation, and the use of various decision processes. Valuatinal abilities encompass knowledge of diverse and conflicting philosophies and value systems, sensitivity in dealing with value questions and issues, and a good understanding of democratic values. Professional abilities relate to a knowledge of human growth and development, a knowledge of the intellectual disciplines, an understanding of human relations and group dynamics, and skill in deliberative group decision processes.

Contextual Influences

Curriculum modification or formulation has been characterized as a rational, collaborative, decision-making process. Figure 3 depicts this process in its context. A broken line is used to suggest the interaction and interdependence of process and context. In reality, process and context are inseparable. For example, planners were described earlier as integral to the process, yet it must be acknowledged that planners

refers to both the actual planning process participants and potential planners - experts, influential authorities, alternative generators, and critics - who are not directly engaged in curriculum planning, but can still exert influence and may become involved in the future. Similarly, although leadership is described as a functional component of the planning process, potential leaders and leadership capabilities make up the process context, exerting influence on curriculum planning, its participants, and its leaders.

The context of curriculum planning refers to the social, political, philosophical, and economic forces that affect the process. The relation of process and context is somewhat like that of human beings and the atmosphere - the context surrounds, permeates, and sustains the process. Figure 3 depicts the interdependence of curriculum planning and the sources, forces, and influences that envelop planners and the process as curriculum is planned.

Society, Learners, Knowledge, and Role of the School

The nature of the society in which the curriculum planning process is undertaken is considered one of the

major contextual influences on the planning process. It is both a source of curriculum goals and content and a continuing influence throughout planning. Society, a dynamic phenomenon characterized by change affecting values, practices, needs, and aspirations, is often the impetus for curriculum planning and societal concerns continually demand the attention of planners throughout the process. Local community characteristics, needs, and aspirations, the needs, abilities and interests of learners for whom the curriculum is being planned, and beliefs and understandings about learning, knowledge, and the role of the school are the sources of the curriculum which exert influence throughout the process. Given the fact that curriculum planning addresses or responds to these curricular sources and influences directly and deliberately (and also indirectly), they are positioned in Figure 3 to suggest their importance to the planning process, particularly at the initiation stage.

Educational Philosophy

Another immensely influential factor, illustrative of the interdependence of curriculum process and context,

is educational philosophy. It has been called the compass of curriculum planning in recognition of its directional, guiding function (Tanner & Tanner, 1980). It is positioned in the planning process model (Figure 3) to suggest its guiding role throughout the planning; its influence is not restricted to any particular place or time. It is omnipresent in curriculum planning.

Philosophical influences directly affecting the curriculum planning process include the platforms of the institution or authority undertaking curriculum development and the philosophical orientations of individual planners. The diversity of attitudes, beliefs, and educational philosophies obtaining in the broader social context also exert continuing, and often conflicting, influence on planners and process.

In dialogical, deliberative group decision making, educational philosophy is not static. It involves the interaction of planners' individual orientations and the philosophical platforms of the planning authority. It is also influenced by the philosophies of organizations and individuals in society (context). Through this ongoing, dynamic, collaborative process, preferred values and directions for the planned curriculum emerge.

History of Curriculum Theory and Practice

Like philosophy, history is a powerful, pervasive contextual influence on curriculum planning. Both the history of curricular ideas and the practical experiences of planners are powerful influences on current and future practice.

The various theoretical perspectives on curriculum planning, distinguished by such labels as theoretic, practical, critical praxis, and so on, all have historical antecedents; in some cases these extend back into antiquity. These historical, theoretical perspectives continue to be articulated, and discussed, and to influence current thought and practice.

Data sources indicate that certain theoretical assumptions and procedures have greater credibility and acceptance in certain historical periods than others. For example, since the turn of the century, scientific assumptions and processes, which are widely accepted in Western culture, have tended to dominate curricular thought and practice, largely to the neglect of other modes of inquiry.

Similarly, participants' personal histories of practical curriculum development (i.e., their planning

experience), referred to by one data source as the lore of accumulated experience, tends to shape current understandings and attitudes of the participations. For example, if previous experience in curriculum change and innovation was negative for the participants, their interest and cooperation will likely be negatively affected. If the experiences were considered worthwhile and rewarding, however, participants will likely respond enthusiastically in future endeavors. The experience of planners and curriculum users need to be understood and addressed in the planning process. The attention in curriculum planning to the problems and deficiencies of existing curricula also illustrate the impact of experience or history on the process.

Other Process Variables

Other influential contextual variables identified are as follows: model or mode of planning, leadership, people involved, organization and deployment, group work climate, evaluation and research, and in-service education. At first glance, it may appear more appropriate to label these process factors rather than context factors.

Given the interdependent view of context and process presented in this study, however, these variables pertaining to the nature of the particular planning process implemented, are also considered contextual. They are positioned in Figure 3 accordingly.

Many different models and modes of planning exist, and no single mode is suitable for every situation. A review of data sources reveals that site-specific curriculum development, attuned to the practical problems of teachers and students, is widely favored. Support also obtains, for an eclectic approach that combines various modes, as the situation requires. In all modes and approaches to planning curriculum, the group decision process of deliberation is used.

The direct impact of leadership variables on the curriculum process has already been described. In addition, various contextual leadership factors exert indirect influence: the views of critics and advocates of alternative curriculum leadership; the alternative curriculum planning theories and styles; new research findings; and the views of skeptics, and those people directly affected by the process.

The influence of participants or planners depends on their expertise and the vital interest they represent.

Data sources unanimously advocate teacher involvement, given their expertise and the stake they have in the outcome of curriculum planning. Students and parents are also generally considered necessary participants. Their vital interests are directly affected by curriculum planning. Furthermore, given the public importance of curriculum and the immense complexity of the curriculum process, it is generally accepted that curriculum planning requires the involvement of representatives of a broad spectrum of interests, abilities, and perspectives.

Various organizational structures and roles make up the context of curriculum planning. No one pattern receives data source endorsement for every situation. Rather, the suitability of a particular plan depends on the quality of the leadership, the provision of both vertical and horizontal decision making, the formation of working groups for job requirements, the integration of diverse competencies into the work teams, the selection of participants on the basis of interest and abilities, and the appropriate assignment of tasks to individuals and groups.

The group work climate, already discussed under leadership, is recognized as a critical influence. The main factors affecting the work climate are human

relations factors, and whether or not the process and its leadership preserves human dignity and involves people in such a way that their potential contribution is maximized.

Evaluation and research are acknowledged to be critical influences in successful curriculum planning. They are ongoing activities aimed at improving the curriculum. Evaluation comprises the following: the diagnosis of needs and problems of society, teachers, and students; the formative evaluation of ideas, methods, strategies, and materials prior to adoption for use; the summative assessment of curriculum products and student learning. Ongoing research serves to inform curriculum planning in many areas, particularly with respect to human development and learning; public needs, wants, and perceptions; and teaching methodologies.

The diffusion of curricular ideas and the inservice education of teachers who use the curriculum is viewed by data sources as critically important. It is generally accepted that curriculum modification or formulation requires changes in people's knowledge, attitudes, and practices. There are differing opinions, however, about how best to provide inservice education; whether to involve all potential users or only representatives of

users in the curriculum formulation or modification process. In the meantime, the necessity of planning for inservice at the formulation stage is widely acknowledged. The context includes not only the inservice programs in operation but also the alternative ideas and proposals of experts at universities and colleges and teachers and other school authorities. All exert influence on the curriculum planning process.

The Complete Theoretical Model

The complete, integrated, theoretical model of curriculum planning is shown in Figure 3. It is an evolutionary model that demonstrates the interrelations among curriculum modification or formulation phases and the other phases of the curriculum planning process; at the same time, it depicts the relations among features integral to the planning process per se and the interdependence and influence of various contextual factors on the curriculum planning process.

The model is composed of five phases, three of which make up the modification or formulation stage of curriculum, which is the focus of attention in the study. The

three modification or formulation phases described in this chapter are the metapanning phase, the study phase, and the creating phase. These phases are not discrete; they overlap one another in the continuous process of curriculum planning. They are linked together primarily through metapanning, or management, of the entire process, through both preplanning and in process planning.

The functional components of the planning process that interact together throughout all the evolutionary phases are the educational purposes, the decision processes, the elements, the planners, and the curriculum leaders.

According to the planning literature, there are several approaches to planning - deductive, inductive, interactive, and evolutionary. These approaches employ various decision processes: logical derivation and evaluation, hypotheses testing and correction, dialogue and deliberation, data gathering and analysis, and formative evaluation. Three of the processes, data gathering and analysis, deliberation, and formative evaluation, are common to all approaches and phases. It has also been shown that comprehensive curriculum planning necessarily involves the eclectic use as necessary of all of the

various approaches and processes. In the model, the various decision processes imply different approaches to curriculum planning.

The interdependent relationship between the context in which planning occurs and the process itself is depicted by means of a broken line encircling the process. The implication is that process and context are inseparable and that their influence on each other is continuous and all encompassing. The categories of contextual influences are the curricular sources, (society, learners, knowledge, role of school), the philosophy of the planning authority and the individual planners, the history of curriculum theory and practice, and the peculiarities of the process itself.

The model represents action over time, which results in curriculum modification or the formulation of a new curriculum, followed by its implementation and evaluation. No significance should be attributed to the size of the spaces for each of the phases. The amount of time necessary to design a curriculum varies from situation to situation; it is influenced by various factors, including the expertise and experience of the planners, the quality of the leadership, and the purposes being pursued; it is also contingent upon contextual factors, including the

level of social stability or change, the degree of philosophical consensus, the impact of history and various other factors of organization, work climate, and the use of evaluation and research.

The model represents the culmination of the interpretative-theoretical methodology outlined for the study. The purpose of the study was the development of a theoretical model of curriculum planning. Five research questions emerging from the theoretical rationale for the study were addressed during the exploration, description, and classification phases of the study. The answers to these questions are represented in the model.

The first research question is "What is the purpose of curriculum planning?" According to the data sources, curriculum planning pursues diverse and multiple purposes (defined as ultimate educational benefits), classified according to focus of attention: the learners, the society, the school, the program, and the planners. Purposes vary, particularly in language and specifics, from one curriculum project to another, depending on many factors, in particular the educational philosophy of the planners and planning authority.

The second research question is "What are the elements of curriculum planning?" Fifty-four elements of

the curriculum planning (modification or formulation) process emerged from the review of the literature. These elements are classified in nine categories: philosophy of education, intentions (goals and objectives), content selection and organization, selection and organization of learning opportunities and activities, evaluation, anticipation of instruction (implementation), deliberation, data gathering and analysis, and formative evaluation. The first six categories are referred to as content elements; they are included in the model as the substantive decisions of phase three, the creating phase. The last three categories are referred to as process elements; they are included as decision processes common to all phases of curriculum development, no matter what the planning approach(s).

The third research question is "Who are the curriculum planners?" Sixty-nine items were extracted from data sources identifying planning process participants. These were categorized into 17 individuals and groups of planners. An examination of their relationship with the curriculum planning process resulted in the following classifications: clients, users, legal authorities, metaplanning system staff, and external experts and influential authorities.

The integral functional role of planners is depicted in the model by a rectangle that extends along the process spiral. A distinction in function obtains between metaplanners (directors of curriculum, curriculum specialists, etc.) and technical planners (clients, users, legal authorities, and external experts and influential authorities), but metaplanners and technical planners are not necessarily different participants - the same people may engage in both types of planning.

In response to the fourth research question, "What are the contextual factors that influence curriculum planning?", 108 items were identified as curricular sources and influences. When classified, six major categories emerged: history and philosophy, society, learners, knowledge, school, and the nature of the process itself.

It is apparent from data sources that the planning process and its context are interdependent phenomena; it is difficult to view any factor as purely either the process or the content. The broken line separating the model's process components and contextual influences is intended to suggest interdependence and interaction. Furthermore, while certain contextual influences or curriculum sources, such as the nature of the society or

the needs of learners, may be deliberately studied at a particular point, their influence is not limited to a particular time or place in curriculum planning, but is present continuously.

The nature of the society, the learners, knowledge, and the role of the school are considered by data sources to be the fountainheads of the curriculum. They are positioned in the model to suggest their immense influence on the initiation of curriculum development. The influence of these factors never ceases to influence curriculum planning, however, they must be continuously monitored throughout the process. Similarly, the other factors - history, philosophy, climate, and so on - are interdependent with the planning process and continuously influence it.

In response to the fifth question, "How does curriculum planning occur?", 259 statements by data sources were extracted and classified into five categories: phases, approaches, processes, and leadership activities. The spiral model of planning represents these features, depicting the process as a multiphase, evolutionary phenomenon that involves the eclectic application of various approaches and decision processes, whose effectiveness is a function of the leadership

provided. The first three phases - metapanning, study and creating - make up the modification or formulation stage, which anticipates the fourth phase, implementation, and which is followed by the fifth phase, evaluation. This study focuses on the modification or formulation of curriculum only; that is, the first three phases.

Metapanning occurs both as a phase and as planning in process throughout all the phases, linking them together. Metapanning is managerial in nature, envisioning the entire planning process and initiating, suggesting, directing, and evaluating throughout. In the study phase, the first of the technical curriculum planning phases, theoretical, valuational, and historical considerations, the needs of the learners and the society, the nature of knowledge, and the role of the school, are considered. Emphasis is on research, study, reflection, and dialogue and deliberation, in the process of evolving the educational philosophy and aims of the curriculum. In the creating phase, the various elements of curriculum (objectives, content, learning opportunities, evaluation and anticipation of instruction), are combined to produce a purposeful educational program. The planning process involves the eclectic application of

deductive, inductive, interactive, and practical decision processes; deliberation is the key process among all the decision processes in curriculum planning.

A review of data sources shows that all of them consider curriculum planning a social or group process requiring dialogue and deliberation in decision-making. Deliberation is an interactive, collaborative group process during which relevant facts are considered, alternative solutions are generated, the consequences of each selection are weighed, and the best course of action is chosen. It is similar to the process engaged in by a jury in arriving at a verdict once the evidence is in. This key decision process is represented in the model by the center arrow extending through all of the phases of curriculum planning. The arrow is flanked on either side by two other arrows which represent decision processes that are commonly accepted in curriculum literature as integral to curriculum planning, namely data gathering and analysis and formative evaluation. The former supplies relevant up-to-date information necessary in decision-making throughout the process. The latter involves the assessment of tentatively selected materials and procedures before their final adoption for use.

It has been shown that comprehensive curriculum

planning requires the eclectic application of all approaches and processes, as the situation demands. The complexity of curricular sources and the myriad of competing interests (social, political, economic, and cultural) necessitates collaborative decision-making. Also, the existing educational philosophy and aims, legislation, policy, and regulations (i.e., the legal and regulatory context in which planning occurs) requires the application of deductive approaches and processes to derive specific curriculum plans from the general philosophy and goals. Pressing curricular problems of students, teachers, and parents often necessitate research and experimental or inductive inquiry that eventually affects the broad philosophy and aims. Consequently, it is necessary to include deductive and inductive planning processes in the model, represented by arrows labelled, logical derivation and evaluation, and hypothesis testing and correcting.

The crucial function of leadership in facilitating and guiding planning process effectiveness is depicted by a rectangle that extends along the entire curriculum planning spiral. It suggests that the organization and deployment of personnel, the creation and maintenance of suitable work climates, the provision of effective means

of communication, the consideration of human relations and group dynamics, the competent administration of deliberative decision-making in accordance with accepted standards of fairness and decency, and related knowledge skills and procedures, are all essential to effective curriculum planning.

Summary

In this chapter the results of the study were incorporated into a visual representation, a theoretical model of curriculum planning. The model was explained in terms of phases, functional components, contextual influences, and as an integrated theoretical model.

In accordance with the requirements of the methodology (interpretative-theoretical) of the study, the explanation phase of the research, like the previous phases of description and classification, was confined to data extracted from the major data sources. In the next chapter, Summary and Conclusions, the contributions of the model to curriculum planning knowledge and its implications for research and practice are discussed.

CHAPTER VI: SUMMARY AND CONCLUSIONS

Introduction

The major purposes of this chapter are to review the study, to discuss the contributions of the model to curriculum planning research, to examine implications for further research, to describe how the model is useful in practice, and to state the general conclusions of the study. The chapter is organized into four sections, corresponding to the stated purposes.

Review of the Study

Although curriculum planning has been subjected to considerable attention by educators since early in the century, it is not understood from an interpretative-theoretical perspective on the theories, research findings, and conclusions of a range of curriculum researchers.

A review of the literature established curriculum planning as a legitimate, inevitable, significant, complex field; its complexity is reflected in the plurality of assumptions, definitions, and models. The review

also revealed the generally idiosyncratic and prescriptive character of existing models, and confirmed the need for the integration of various and diverse perspectives to assist in comprehending the curriculum planning process and to serve as a guide to practice. The purpose of this study, therefore, was to develop a theoretical model of curriculum planning that incorporates the views and research findings of various curriculum researchers into a theoretical framework.

In the study, the theoretical model of curriculum planning was developed from the theories, findings, and conclusions of the 12 most frequently cited curriculum researchers. The interpretative-theoretical methodology employed was rigorous and deliberative. It consisted of four distinct, sequential phases. The first phase, exploration, provided the research questions used to guide the investigation of curriculum planning and presented the data gathered from the data sources. The exploration phase also provided the operational definitions for the study, and established the criteria for selecting the major data sources. Phase two of the methodology, description, involved the systematic analysis of the data and their comparison. Research questions posited in the exploration phase provided the

framework for the analysis. In turn, the analysis furnished the data base from which categories were developed in the subsequent phase, classification. The third phase, classification, consisted of the development of categories which organize the data and aid in the clarification of thought relative to the phenomenon being studied. This phase included processes of analysis, abstraction, and generalization, based on established criteria.

In the fourth phase of the study, explanation, the conceptualization of the theoretical relationships was finalized with the construction of a theoretical model of curriculum planning. The model provides answers to the five research questions posed in the first phase of the study:

1. What is the purpose of curriculum planning?
2. What are the elements of curriculum planning?
3. Who are the curriculum planners?
4. What are the contextual factors that influence curriculum planning?
5. How does curriculum planning occur?

Four categories of purposes of curriculum planning, defined as ultimate educational benefits, emerged from the study. These categories contain purposes for the

learners, the society, the school and the program, the planning process and its participants (the planners). Within those categories, the purposes of curriculum planning vary in language and specifics, depending on the project.

Nine categories of elements of curriculum planning were identified: philosophy of education and aims, intentions (goals and objectives), selection and organization of content, selection and organization of learning opportunities and activities, evaluation, anticipation of instruction (implementation), deliberation, data gathering and analysis, and formative evaluation. The first six are content elements and the last three are process elements.

The curriculum planners were identified according to their relationship with the curriculum process. There are five categories of planners: the clients, the users, the legal authorities, the metaplanning system staff, and the external experts and influential authorities.

The study demonstrated the interdependent relationship between the curriculum planning process and its social-political content. Six major categories of contextual influences emerged from the study: the history and philosophy of education and curriculum; the

nature of the society and the local community; the needs, abilities, and aspirations of learners; understandings and beliefs about knowledge; the peculiar nature of the planning process; the role of the school in society and in the local community.

The study concluded that curriculum planning is an evolutionary process comprised of five sequential phases: metapanning, study, creating, implementing, and evaluating. The first three make up the modification or formulation stage, which was the focus of attention in this study. Curriculum planning is described as a social process involving leaders and planners who employ group deliberation and a combination of related decision processes (data gathering and analysis, formative evaluation, logical derivation and evaluation, and hypothesis testing and correction) to move the curriculum development process in the direction of educational purposes.

Leadership is a critically important function. It facilitates process effectiveness in the context of the many social-political forces and influences that make up the planning milieu. It demands knowledge of the intellectual disciplines and conventional wisdom, knowledge of curriculum development, and skill in human relations, group dynamics and various decision processes,

particularly group deliberation.

The data base of the study is limited to knowledge of curriculum planning as reported by the 12 data sources. The theoretical model developed represents an interpretation of a closed set of findings, and the integration of the various theories, models and research reported by the sources. It does not provide answers to all curriculum planning questions, but it is seen as agreeing in broad outline with the major features of the curriculum planning process. It is viewed as a descriptive approximation of curriculum planning. The utility of the theoretical model relates to its heuristic potential, its implicit hypotheses for further research, and its suitability as a guide for practice.

Contributions of the Study

The purpose of model building is to improve understanding of a phenomenon and the interrelationships among phenomena. Model building is a key to conceptualizing our understanding of a situation or process (Lippitt, 1973, p. 73). The model developed in this study is a theoretical or explanatory model. It contributes to knowledge of the curriculum planning process through the reexamination of major questions and the manipulation of an extensive sample of data sources. It has made the explanation of curriculum planning more adequate in several ways:

1. It represents curriculum planning as a multi-purpose process. These purposes relate to the curriculum planners, the learners, the society, the school, and the program.

2. It demonstrates that curriculum planning is an evolutionary process, occurring in interlinked phases under the guidance of metapanning.

3. It recognizes the social nature of curriculum planning and the key role of group deliberation as a decision process. This reality has not been given due emphasis in many other models.

4. It depicts the eclecticism of decision processes required in comprehensive curriculum planning. Eclecticism of decision processes to this extent has not been represented in previous models.

5. It confirms the role of a variety of participants in the planning process: users, clients, legal authorities, metaplanners, and external experts and influential authorities.

6. It confirms the crucial function of leadership in moving the process forward, and the necessity for extensive knowledge and skill pertaining to disciplined knowledge, curriculum development, human relations and group dynamics, and the various decision processes, particularly that of group deliberation.

7. It demonstrates the influence of history and philosophy on curriculum processes. The influence of history is not often recognized in curriculum models.

8. It illustrates the interdependence of the planning process and its context, representing these realities as constantly influencing each other.

9. It incorporates a broader data base than other theoretical models of curriculum planning - 12 of the most frequently cited curriculum researchers.

10. It reconfirms society, community, learners, knowledge, and school as curriculum sources and stresses

their constant contextual influence on the curriculum process.

11. It reconfirms and illustrates the influence of process variables, such as organization, work climate, evaluation and research, and inservice education.

12. It demonstrates the interrelationships among the curriculum modification or formulation phases and the other phases of curriculum planning, namely implementation and evaluation.

13. It represents a synthesis of diverse theoretical perspectives on curriculum planning, which is a new departure in curriculum theory development.

Implications for Educational Research

The theoretical model of curriculum planning developed in this study is descriptive and explanatory. It provides a framework for considering the practice of curriculum planning. The model, which represents the general nature of the curriculum planning process, provides a structure from which needs for further research are readily identified. Although it suggests relationships, it does not have direct predictive signif-

icance.

Suggestions for further research include the following: the need to test the hypothesis implicit in the model, including the research questions identified below; and the need to improve and extend the model, or building new models, in pursuit of better curriculum planning theory.

Research questions suggested by the model include the following:

1. How does the application and use of decision making processes vary with each phase of curriculum planning?
2. What are the implementation and evaluation considerations to be taken into account during the modification or formulation phases?
3. What are the planning tasks of the implementation phase?
4. What are the planning tasks of the evaluation phase?
5. Who evaluates the curriculum?
6. Who implements the curriculum?
7. What contextual factors influence curriculum implementation?
8. What contextual factors influence curriculum

evaluation?

9. How does curriculum implementation occur?
10. How does curriculum evaluation occur?
11. What managerial (metaplanning) strategies are most effective in curriculum planning?
12. What are the best leadership qualities for effective curriculum planning?
13. How is curriculum planning influenced by different theoretical and practical histories?
14. How does the philosophy of the planning authority influence curriculum planning?
15. How do the philosophical platforms of curriculum planners influence the planning process?
16. Are there optimal organizational structure(s) for curriculum planning?
17. What are the best climatic (working) conditions for curriculum planning?
18. What is the role of evaluation and research at each phase of the curriculum planning process?
19. What is the role of inservice education at each phase of the curriculum planning process?
20. How might the model be changed as a result of practical application?

Implications for Practice

The theoretical model of curriculum planning is not prescriptive, but because it was developed from an empirical investigation of existing conceptual schemes, theories, and research findings, it is useful for the identification of factors to be considered in planning curriculum modification or formulation.

The following are some of the implications of the theoretical model developed in this study for curriculum planning at the modification or formulation stage:

1. Comprehensive curriculum planning should simultaneously pursue purposes (defined as ultimately desired educational benefits) in several categories, including purposes pertaining to the learners, the society, the community, the school, the program, and the participants in the planning process.

2. Effective curriculum planning cannot be forced; it must be allowed to emerge through interlinked planning phases.

3. Managerial planning, or metapanning, consisting of preplanning and planning in process, is required for envisioning, guiding, and supporting technical curriculum development throughout the process.

4. Comprehensive curriculum modification or formulation is a social process requiring group deliberation and the eclectic application of various decision processes. It cannot be limited to one or two decision-making processes.

5. Curriculum implementation and evaluation must be anticipated and planned for to some extent in the modification or formulation phases.

6. Curriculum planners should be representative of users, clients, legal authorities, and external experts and influences; they must possess the diverse knowledge and abilities required.

7. Leadership is a critically influential factor in successful curriculum planning, requiring extensive knowledge and superior ability, particularly in human relations and the processes of group deliberation.

8. The planning process and the context in which it occurs are interdependent, indivisible phenomena that continually, and often imperceptibly, influence each other.

9. Curricular sources (society, community, learners, knowledge, and school) are contextual influences of such importance that they must be deliberately studied and continually monitored in the modification or formulation

phases of curriculum planning.

10. Curriculum planners should understand the influence of educational philosophy on the planning process, including that of the planning authority and the personal philosophies of individual planners, and the importance of philosophical interaction in deliberative curriculum development.

11. Planners need to understand that current curriculum planning efforts are directly influenced by historical developments - that is, the curriculum planning experiences of the participants and the history of curriculum theory.

12. Various other factors - planning mode(s), organizational structures and roles, group work climate, the attention given to evaluation and research findings, and the quality of the inservice education for planners and curriculum users - influence the success of comprehensive curriculum planning.

13. The theoretical model of this study is but an approximation, a simplification of the complex phenomenon referred to as curriculum planning. The model is subject to change and improvement through practical use and research.

14. The theoretical model of curriculum planning in

this study is not intended to answer all curriculum planning questions, but rather to serve as a guide to theory development and practice, making it possible for different points of view and backgrounds to focus on the nature of the process. The model can serve analytical, descriptive, theoretical purposes, and it can facilitate decisions on a course of action.

This study presents the development of a theoretical model of planning for curriculum modification or formulation and its relationship to implementation and evaluation. The methodology employed in the study demanded a careful, indepth evaluation of data sources based on pre-established criteria. The systematic, multiphase treatment of the data demanded by the methodology used, renders the model theoretical. The conceptualization that emerged provides a synthesis and explanation of what is known about the curriculum planning process by the data sources investigated.

References

- Ackoff, L.R. (1970). A concept of corporate planning. New York: Wiley.
- Alexander, H.G. (1972). The language and logic of philosophy. Albuquerque: University of New Mexico Press.
- Anyon, J. (1981). Social class and school knowledge. Curriculum Inquiry, 11, 3-42.
- Anyon, J. (1980). Social class and the hidden curriculum of work. Journal of Education, 162, 67-92.
- Apple, M.W. (Ed.). (1982a). Cultural and economic reproduction in education. London: Routledge and Kegan Paul.
- Apple, M.W. (1982b). Education and power. Boston: Routledge and Kegan Paul.
- Apple, M.W. (1979a). Ideology and curriculum. London: Routledge and Kegan Paul.
- Apple, M.W. (1985). Making knowledge legitimate: Power, profit, and the textbook. In A. Molnar (Ed.), Current thought on curriculum (pp. 73-90). Washington, DC: Association for Supervision and Curriculum Development.

- Apple, M.W. (1979b). On analyzing hegemony. Journal of Curriculum Theorizing, 1, 10-27.
- Apple, M.W. (1984). The political economy of text publishing. Educational Theory, 34, 307-319.
- Apple, M.W., & Weis, L. (Eds.). (1983). Ideology and practice in schooling. Philadelphia: Temple University Press.
- Babin, P. (1981). Canadian curriculum issues in perspective. Ottawa: University of Ottawa Press.
- Bagnall, R.D., Recchia, M.A., & Robinson, Y. (1980). The bases of the curriculum: Theory and development. Lake Grove, NY: Currdel.
- Banghart, F.W., & Trull, A., Jr. (1973). Educational planning. New York: Macmillan.
- Beach, E.F. (1957). Economic models: An exposition. New York: Wiley.
- Beauchamp, G.A. (1983). Curriculum design. In F.W. English (Ed.), Fundamental curriculum decisions. Alexandria, VA: Association for Supervision and Curriculum Development.
- Beauchamp, G.A. (1964). The curriculum of the elementary school. Boston: Allyn & Bacon.
- Beauchamp, G.A. (1981). Curriculum theory. Itasca, IL: Peacock.

- Beauchamp, G.A. (1982). Curriculum theory: Meaning, development and use. Theory Into Practice, 21, 23-27.
- Beer, S. (1979). Heart of enterprise. New York: Wiley.
- Belth, M. (1965). Education as a discipline. Boston: Allyn & Bacon.
- Belth, M. (1970). The new world of education. Boston: Allyn & Bacon.
- Beniskos, J.M. (1980). Person-education: Thoughts of a Christian educator. Ottawa: University of Ottawa Press.
- Berman, L. (1968). New priorities in the curriculum. Columbus, OH: Merrill.
- Bernstein, R.J. (1976). The restructuring of social and political thought. Philadelphia: University of Pennsylvania Press.
- Bestor, A. (1955). The restoration of learning. New York: Knopf.
- Black, M. (1966). Models and metaphors. Ithaca, NY: Cornell University Press.
- Bloom, B.S. (1981). All our children learning: A primer for parents, teachers, and other educators. New York: McGraw-Hill.
- Bobbitt, F. (1924). How to make a curriculum. New York: Houghton Mifflin.

- Bruner, J.S., Goodnow, J.J., & Austin, G.A. (1967). A study of thinking. New York: Wiley.
- Bullough, R.V., Jr., Goldstein, S.L., & Holt, L. (1984). Human interests in the curriculum. New York: Teachers College Press.
- Byrne, H.W. (1977). A Christian approach to education. Milford, MI: Mott Media.
- Camhis, M. (1979). Planning theory and philosophy. London: Tavistock.
- Caswell, N., & Campbell, D. (1935). Curriculum development. New York: American Book.
- Caws, P. (1974). Operational, representational, and explanatory models. American Anthropologist, 76, 1-10.
- Chadwick, G. (1978). A systems view of planning: Towards a theory of the urban and regional planning process. Oxford: Pergamon.
- Chapanis, A. (1961). Man, machines, and models. The American Psychologist, 16, 113-131.
- Common, D.L. (1978). A theoretical model for curriculum implementation. Unpublished doctoral dissertation, University of Ottawa, Ottawa.
- Conant, J.B. (1951). Science and common sense. New Haven, CT: Yale University Press.

- Connelly, M. (1972). The functions of curriculum development. Interchange, 3, 161-177.
- Connelly, M.F. (1971). Some considerations on the status, relationship to research, character, and study of curriculum development: An overview. Curriculum Theory Network (monograph supplement, Elements of Curriculum Development, 164-173).
- Connelly, M.F., & Ben-Peretz, M. (1980). Teachers' roles in the using and doing of research and curriculum development. Journal of Curriculum Studies, 12(2), 95-107.
- Connelly, M.F., & Elbaz, F. (1980). Conceptual bases for curriculum thought: A teacher's perspective. In A.W. Foshay (Ed.), Considered action for curriculum improvement (pp. 95-119). Alexandria, VA: Association for Supervision and Curriculum Development.
- Coombs, P.H. (1970). What is educational planning? Paris: International Institute for Educational Planning.
- de Groot, A.D. (1969). Methodology foundations of inference and research in the behavioral sciences. (J.A.A. Spiekerman, Trans.). The Hague: Mouton.
- Dewey, J. (1902). The child and the curriculum. Chicago: University of Chicago Press.

- Dewey, J. (1966). Democracy and education. New York: Free Press.
- Dewey, J. (1929a). The quest for certainty. New York: Minton, Belch.
- Dewey, J. (1929b). The sources of a science of education. New York: Liveright.
- Dobson, R.R., & Dobson, J.E. (1987). Curriculum theorizing. The Educational Forum, 51, 275-283.
- Doll, R.C. (1982). Curriculum improvement: Decision making and process. Boston: Allyn & Brown.
- Dow, I., Whitehead, R.Y., & Wright, R.L. (1984). Curriculum implementation: A framework for action. Ottawa: University of Ottawa.
- Dror, Y. (1971). Ventures in policy science. New York: American Elsevier.
- Dubin, R. (1978). Theory building. New York: Free Press.
- Einstein, A. (1950). Out of my later years. New York: Philosophical Library.
- Einstein, A. (1934). The world as I see it. New York: Covici, Friede.
- Eisner, E.W. (1979). The educational imagination: On the design and evaluation of school programs. New York: Macmillan.

- Eisner, E.W. (1985). The educational imagination (2nd ed.). New York: Macmillan.
- Faludi, A. (1973). Planning theory. Oxford: Pergamon.
- Freire, P. (1985). The politics of education, culture, power, and liberation. South Hadley, MA: Bergin and Garvey.
- Friedmann, J. (1973). Retracking America: A theory of transactive planning. New York: Anchor/Doubleday.
- Gay, G. (1985). Curriculum development. In T. Husan & T.N. Portlethwaite (Eds.), The international encyclopedia of education (Vol. 2, pp. 1170-1179). Oxford: Pergamon.
- Giroux, H.A. (1980). Critical theory and rationality in citizenship education. Curriculum Inquiry, 10, 329-366.
- Giroux, H.A. (1981). Ideology, culture and the process of schooling. Philadelphia: Temple University Press.
- Giroux, H.A. (1983). Theory and resistance in education: A pedagogy for the opposition. South Hadley: Bergin and Garvey.
- Giroux, H.A., Penna, A.N., & Pinar, W.F. (Eds.). (1981). Curriculum and instruction. Berkeley, CA: McCutcheon.

- Giroux, H.A., & Simon, R. (1985). Curriculum study and cultural politics. Education Digest, 51, 15-18.
- Goodlad, J.I. (1979). Curriculum inquiry: The study of curriculum practice. New York: McGraw-Hill.
- Goodlad, J.I. (1966). The development of a conceptual system for dealing with problems of curriculum and instruction. Los Angeles: University of California Press.
- Gruchy, A.G. (1982). Planning in contemporary institutional thought. Journal of Economic Issues, 16, 371-379.
- Habermas, J. (1971). Knowledge and human interests. Boston: Beacon Press.
- Hall, C.S., & Lindzey, G. (1970). Theories of personality. New York: Wiley.
- Halpin, A.W. (1958). The development of theory in educational administration. In A.W. Halpin (Ed.), Administrative theory in education (pp. 1-19). London: Collier Macmillan.
- Halpin, A.W. (1978). Theory and research in administration. New York: Macmillan.
- Hanson, N.R. (1965). Patterns of discovery. Cambridge: University Press.

- Hosford, P.L. (1973). An instructional theory: A beginning. Englewood Cliffs, NJ: Prentice-Hall.
- Hoy, W.K., & Miskel, C.G. (1978). Educational administration: Theory, research and practice. New York: Random House.
- Huebner, D. (1975a). Curriculum as concern for man's temporality. In W. Pinar (Ed.), Curriculum theorizing: The reconceptualists (pp. 237-249). Berkeley, CA: McCutcheon.
- Huebner, D. (1975b). Personal statement. In W. Pinar (Ed.), Curriculum theorizing: The reconceptualists (pp. 213-215). Berkeley, CA: McCutcheon.
- Hultgren, F.H. (1982). Reflecting on the meaning of curriculum through a hermeneutic interpretation of student-teaching experiences in home economics. Unpublished doctoral dissertation, Pennsylvania State University Park, PA.
- Hyman, R.T. (1973). The curriculum issue. In R.T. Hyman (Ed.), Approaches in curriculum (pp. 3-20). Englewood Cliffs, NJ: Prentice-Hall.
- Inbar, D.E. (1980). Educational planning: A review and a plea. Review of Educational Research, 50, 377-392.
- Inbar, D.E. (1973). Organizational patterns of educational planning. Comparative Education, 9(2), 73-79.

- Inbar, D.E. (1975). The educational planning system: Change and tension. Future, 7(12), 119-128.
- Jackson, P.W. (1968). Life in classrooms. New York: Holt, Rinehart and Winston.
- Jenkins, I., & Shipman, M.D. (1976). Curriculum: An introduction. London: Open Books.
- Johnson, M. (1967). Definitions and models in curriculum theory. Educational Theory, 17(2), 127-140.
- Johnson, M. (1977). Intentionality in education. New York: State University of New York, Center for Curriculum Research and Services.
- Johnson, M. (1969). The translation of curriculum into instruction. Journal of Curriculum Studies, 115-131.
- Kahn, A.J. (1969). Theory and practice of social planning. New York: Russell Sage Foundation.
- Kaplan, A. (1964). The conduct of inquiry: Methodology for behavioural science. San Francisco: Chandler.
- Katen, T.E. (1973). Doing philosophy. Englewood Cliffs, NJ: Prentice-Hall.
- Kimbrough, R.B., & Nunnery, M.Y. (1983). Educational administration. New York: Macmillan.
- King, W.R., & Cleland, D.I. (1978). Strategic planning and policy. New York: Van Nostrand Reinhold.

- Kirst, M.W., & Walker, W.F. (1971). An analysis of curriculum policy-making. Review of Educational Research, 41, 479-510.
- Kliebard, H.M. (1982a). Curriculum theory as metaphor. Theory Into Practice, 21, 11-17.
- Kliebard, H.M. (1982b). Education at the turn of the century: A crucible for curriculum change. Educational Researcher, 11, 16-24.
- Kliebard, H.M. (1985). Three currents of American thought. In A. Molnar (Ed.), Current thought on curriculum. Alexandria, VA: Association for Supervision and Curriculum Development.
- Klohr, P. (1980). The curriculum field - gritty and ragged? Curriculum Perspectives, 1, 1-7.
- Knezevich, S.J. (1984). Administration of public education. San Francisco: Harper & Row.
- Koontz, H., & O'Donnell, C. (1955). Principles of management. New York: McGraw-Hill.
- Kuhn, T.S. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago.
- Leithwood, K. (1982). Studies in curriculum decision making. Toronto: OISE Press.

- Lewis, A.J., & Miel, A. (1978). Key words relating to curriculum and instruction. In J.R. Gress & D.E. Purpel (Eds.), Curriculum: An introduction to the field (pp. 17-24). Berkeley, CA: McCutcheon.
- Lewis, A.J., & Miel, A. (1972). Supervision for improved instruction. Belmont, CA: Wadsworth.
- Lippitt, G.L. (1973). Visualizing change: Model building and the change process. La Jolla, CA: University Associates.
- Lutz, F.W. (1975). The role of explanatory models in theory building: In response to Le Doux - Burlingame. Educational Administration Quarterly, 2, 72-78.
- Macdonald, J.B. (1975a). Curriculum and human interests. In W. Pinar (Ed.), Curriculum theorizing (pp. 283-294). Berkeley, CA: McCutcheon.
- Macdonald, J.B. (1975b). Curriculum theory. In W. Pinar (Ed.), Curriculum theorizing (pp. 5-13). Berkeley, CA: McCutcheon.
- Macdonald, J.B. (1965). Independent learning: The theme of the conference. In G. Gleason (Ed.), The theory and nature of independent learning (pp. 1-13). Scranton, PA.

- Macdonald, J.B., & Purpel, D.E. (1987). Curriculum and planning: Visions and metaphors. Journal of Curriculum Supervision, 2, 178-192.
- Macdonald, J.B., & Zaret, E. (1975). Schools in search of meaning. Washington, DC: Association for Supervision and Curriculum Development.
- Marzano, R.J., Brandt, R.S., Hughes, C.S., Jones, B.F., Presseisen, B.Z., Rankin, S.G., & Suhor, C. (1988). Dimensions of thinking: A framework for curriculum and instruction. Alexandria, VA: Association for Supervision and Curriculum Development.
- McNeil, J.D. (1981). Curriculum: A comprehensive introduction. Toronto: Little, Brown.
- Miller, J.P., & Sellar, W. (1985). Curriculum perspectives and practice. New York: Longman.
- Morphet, E.L., Johns, R.L., & Reller, T.L. (1982). Educational organization and administration. Englewood Cliffs, NJ: Prentice-Hall.
- Mouly, G. (1978). Educational research: The art and science of investigation. Boston: Allyn & Bacon.
- O'Connor, D.J. (1969). An introduction to the philosophy of education. New York: Philosophical Library.

- Oliva, P.F. (1982). Developing the curriculum. Boston: Little, Brown.
- Orlosky, D.E., & Smith, S.O. (1978). Curriculum development: Issues and insights. Chicago: Rand McNally.
- Pinar, W. (1981). Life history and educational experience: Part two. Journal of Curriculum Theorizing, 3, 259-286.
- Pinar, W. (1978a). Notes on the curriculum field. Educational Researcher, 7(8), 5-12.
- Pinar, W. (1978b). The reconceptualization of curriculum studies. Journal of Curriculum Studies, 10, 205-214.
- Pinar, W. (1975). Search for a method. In W. Pinar (Ed.), Curriculum theorizing: The reconceptualists (pp. 415-426). Berkeley, CA: McCutcheon.
- Pinar, W., & Grumet, M.R. (1976). Toward a poor curriculum. Dubuque, IA: Kendall/Hunt.
- Posner, G., & Strike, K. (1976). A categorization scheme for principles of sequencing content. Review of Educational Research, 46, 665-690.
- Prakash, M.S., & Waks, L.J. (1985). Four conceptions of excellence. Teachers College Record, 87, 79-101.
- Pratt, D. (1980). Curriculum design and development. New York: Harcourt Brace Jovanovich.

- Pratt, D. (1987). Curriculum design and humanistic technology. Journal of Curriculum Studies, 19, 149-162.
- Rickman, H.P. (1967). Understanding and the human studies. London: Heinemann.
- Rist, R.G. (1977). On the relations among educational research paradigms: From disdain to detente. Anthropology and Education Quarterly, 8(2), 42-49.
- Rogers, F.A. (1983). Curriculum research and evaluation. In F.W. English (Ed.), Fundamental curriculum decisions. Alexandria, VA: Association for Supervision and Curriculum Development.
- Sarason, S.B. (1982). The culture of the classroom and the problem of change (2nd ed.). Boston: Allyn & Bacon.
- Saylor, J.G., & Alexander, W.M. (1974). Planning curriculum for schools. New York: Holt, Rinehart & Winston.
- Saylor, J.G., Alexander, W.M., & Lewis, A.T. (1981). Curriculum planning for better teaching and learning. Toronto: Holt, Rinehart & Winston.
- Schiro, M. (1978). Curriculum for better schools: The great ideological debate. Englewood Cliffs, NJ: Educational Technology.

- Schubert, W.H. (1980). Curriculum books: The first eighty years. Lanham, MD: University Press of America.
- Schwab, J.J. (1970). The practical: A language for curriculum (rev. ed.). Washington, DC: National Education Association.
- Schwab, J.J. (1971). The practical: Arts of eclectic. School Review, 79, 493-542.
- Schwab, J.J. (1978). The practical 3: Translation into curriculum. In I. Westbury & N.J. Wilkof (Eds.), Science, curriculum and liberal education (pp. 365-383). Chicago: University of Chicago Press.
- Schwab, J.J. (1983). The practical 4: Something for curriculum professors to do. Curriculum Inquiry, 13, 239-265.
- Sequel, M.L. (1966). The curriculum field: Its formative years. New York: Teachers College Press.
- Sergiovanni, T.J., & Carver, F.D. (1980). The new school executive. New York: Harper & Row.
- Short, E.C. (1982). Curriculum development and organization. In N.E. Mitzel (Ed.), Encyclopedia of educational research (5th ed., pp. 405-412). New York: Macmillan.

- Short, E.C. (1985). Organizing what we know about curriculum. Curriculum Inquiry, 15, 237-243.
- Short, E.C. (1983). The forms and use of alternative curriculum development strategies: Policy implications. Curriculum Inquiry, 13, 43-64.
- Short, E.C., & Jennings, J.J., Jr. (1976). Multi-disciplinary: An alternative approach to curriculum thought. Educational Leadership, 33, 590-594.
- Sloma, R.S. (1984). No-nonsense planning. New York: Free Press.
- Smith, B.O., Stanley, W.O., & Shores, H.J. (1951). Fundamentals of curriculum development. New York: Harcourt, Brace and World.
- Starrs, C. (1949). General and industrial management. London: Pitman.
- Steers, R.M., Ungson, G.R., & Mowday, R.T. (1985). Managing effective organizations: An introduction. Boston: Kent.
- Steiner, G.A. (1969). Top management planning. New York: Macmillan.
- Steller, A.W. (1983). Curriculum planning. In F.W. English (Ed.), Fundamental curriculum decisions (pp. 68-89). Alexandria, VA: Association for Supervision and Curriculum Development.

- Stenhouse, L. (1975). An introduction to curriculum research and development. New York: Holmes and Meier.
- Taba, H. (1962). Curriculum development, theory and practice. New York: Harcourt, Brace and World.
- Tanner, D., & Tanner, L.N. (1980). Curriculum development: Theory into practice. New York: Macmillan.
- Taylor, P.H., & Richards, C. (1985). An introduction to curriculum studies. Windsor, Berkshire: NFER/Nelson.
- Thompson, M.M. (1951). An outline of the history of education (rev. ed.). New York: Barnes & Noble.
- Tibble, J.W. (1966). The study of education. London: Routledge and Kegan Paul.
- Toulmin, S. (1953). The philosophy of science. London: Hutchinson's University Library.
- Toulmin, S. (1967). The philosophy of science. London: Hutchinson's University Library.
- Travers, R.M. (1970). An introduction to educational research. New York: Macmillan.
- Troub, R.M. (1982). A general theory of planning: The evolution of planning and the planning of evolution. Journal of Economic Issues, 16, 381-390.
- Tyler, R. (1968). Basic principles of curriculum and instruction. Chicago: University of Chicago Press.

- Tyler, R. (1957). The curriculum then and now. In Proceedings of the 1956 conference on testing problems. Princeton, NJ: Educational Testing Service.
- Walker, D.F. (October, 1971). A naturalistic model for curriculum development. School Review, pp. 51-65.
- Walker, D.F. (1979). Approaches to curriculum development. In J. Schaffarzick & G. Sykes (Eds.), Value conflicts and curriculum issues: Lessons from research and experience (pp. 263-290). Berkeley, CA: McCutcheon.
- Walker, D.F., & Soltis, J.F. (1986). Curriculum and aims. New York: Teachers College, Columbia University.
- Webster's New World Dictionary of the American Language. (1984). New York: Warner Books.
- Westbury, I., & Wilkof, N.J. (Eds.). (1978). Joseph J. Schwab, science, curriculum and liberal education: Selected essays. Chicago: University of Chicago Press.
- Wright, R.L. (1982). A contextual model of curriculum implementation. Unpublished doctoral dissertation, University of Ottawa, Ottawa.
- Zais, R.S. (1976). Curriculum principles and foundations. New York: Crowell.

APPENDIX A

Curriculum Textbooks Published Between January,
1980 and June, 1986

- Allman, S.A., Kopp, G.W., & Zufelt, D.L. (1980). Curriculum development: A reflection of programmatic trends. Boston: American Press.
- Bagnall, R.D., Recchia, M.A., & Robinson, V. (1980). The bases of the curriculum: Theory and development. Lake Grove, NY: Curddel.
- Bank, A., Henderson, M., & Eu, L. (1981). Practical guide to program planning: A teaching models approach. New York: Teachers College Press.
- Barnes, D. (1982). Practical curriculum study. Boston: Routledge and Kegan Paul.
- Barrow, R. (1984). Giving teaching back to teachers: A critical introduction to curriculum theory. Totowa, NJ: Barnes & Noble.
- Bellon, J.J., & Handler, J.R. (1982). Curriculum development and evaluation: A design for improvement. Dubuque, IA: Kendall/Hunt.
- Brubaker, D.L. (1982). Curriculum planning: The dynamics of theory and practice. Glenview, IL: Scott, Foresman.

- Doll, R.C. (1982). Curriculum improvement: Decision making and process. Boston: Allyn & Bacon.
- Eisner, E.W. (1985). The educational imagination: On the design and evaluation of school programs. New York: Macmillan.
- Holt, M. (1983). Curriculum workshop: An introduction to whole curriculum planning. Boston: Routledge and Kegan Paul.
- Hunkins, F.P. (1980). Curriculum development: Program improvement. Toronto: Merrill.
- Kelly, A.V. (1982). The curriculum: Theory and practice. London: Harper & Row.
- Kemp, J.E. (1985). The instructional design process for education and training. New York: Harper & Row.
- McNeil, J.D. (1981). Curriculum: A comprehensive introduction. Boston: Little, Brown.
- McNeil, J.D. (1984). Curriculum: A comprehensive introduction. Boston: Little, Brown.
- Melton, R.F. (1982). Instructional models for course design and development. Englewood Cliffs, NJ: Educational Technology.
- Miller, J.P., & Seller, W. (1985). Curriculum perspectives and practice. New York: Longman.

- Oliva, P.F. (1982). Developing the curriculum. Boston: Little, Brown.
- Posner, G.J., & Rudnitsky, A.N. (1982). Course design: A guide to curriculum development for teachers. New York: Longman.
- Pratt, D. (1980). Curriculum design and development. New York: Harcourt Brace Jovanovich.
- Robinson, F.G., Ross, J.A., & White, F. (1985). Curriculum development for effective instruction. Toronto: OISE Press.
- Romiszowski, A.J. (1981). Designing instructional systems: Decision making in course planning and curriculum design. New York: Nichols.
- Rowntree, D. (1981). Developing courses for students. London: McGraw-Hill.
- Saylor, J.G., Alexander, W.M., & Lewis, A.J. (1981). Curriculum planning for better teaching and learning. New York: Holt, Rinehart & Winston.
- Schubert, W.H. (1986). Curriculum: Perspective, paradigm, and possibility. New York: Macmillan.
- Tanner, D., & Tanner, L.N. (1980). Curriculum development: Theory into practice. New York: Macmillan.

- Taylor, P.H., & Richards, C.M. (1985). An introduction to curriculum studies. Windsor, Berkshire: NFER/Nelson.
- Unruh, G.G., & Unruh, A. (1984). Curriculum development: problems, processes and progress. Berkeley, CA: McCutcheon.
- Wiles, J., & Bondi, J.C. (1984). Curriculum development: A guide to practice. Columbus, OH: Merrill.
- Westmeyer, P. (1981). Curriculum planning on the local school or district level. Springfield, IL: Thomas.
- Wulf, K.M., & Schave, B. (1984). Curriculum design: A handbook for educators. Glenview, IL: Scott, Foresman.
- Zenger, W.F., & Zenger, S.K. (1982). Curriculum planning: A ten step process. Palo Alto, CA: R&E Research Associates.

APPENDIX B

Rank Order of Researchers by Number of Citations in
Current Curriculum Textbooks

Researcher	Frequency of Citation
Dewey, J.	264
Tyler, R.W.	250
Taba, H.	139
Bloom, B.S.	123
Goodlad, J.I.	109
Eisner, E.W.	88
Smith, B.O.	79
Saylor, G.J.	72
Cremin, L.A.	71
Bobbitt, F.	68
Bruner, J.S.	68
Doll, R.C.	68
Alexander, W.M.	65
Macdonald, J.B.	64
Schwab, J.J.	61
Tanner, D.	61
Joyce, B.	58
Caswell, H.L.	54
Tanner, L.	54
Gagne, R.M.	48
Walker, D.F.	48
Johnson, M.	46
Stanley, W.O.	45
Popham, W.J.	44
Stufflebeam, D.L.	44
Shores, J.H.	43
Beauchamp, G.A.	42
Stenhouse, L.	42
Hirst, P.	40
Shane, H.	40

(table continues)

Researcher	Frequency of Citation
Apple, M.	39
Kliebard, H.M.	39
Giroux, H.	38
Lewis, A.J.	37
Rugg, H.	37
Stake, R.E.	37
Krathwohl, D.R.	36
Charters, W.W.	35
Friere, P.	35
Phenix, P.H.	35
Broudy, H.S.	34
Mager, R.F.	34
Counts, G.S.	33
Whitehead, A.N.	33
Silberman, C.A.	32
Foshay, A.W.	30
Weil, M.	30
Hopkins, L.T.	29
Kelly, A.V.	29
Kilpatrick, W.H.	29
McNeil, J.D.	29
Zais, R.S.	29
Bondi, J.J.	27
Huebner, D.	27
Wiles, J.	27
Cronbach, L.J.	25
Conant, J.B.	24
Grumet, M.	24
Bellack, A.A.	23
Fantini, M.	23
Lawton, D.	23
Scriven, M.	23
Miel, A.	22
Walberg, H.J.	22

(table continues)

Researcher	Frequency of Citation
Brownell, J.A.	21
Combs, A.W.	21
Greene, M.	21
Schubert, W.H.	21
Butts, R.F.	20
Campbell, D.S.	20
Kirst, M.	20
Macdonald, B.	20
Brameld, T.	19
Hunkins, F.J.	18
Jackson, P.W.	18
Parker, F.W.	18
English, F.W.	17
Hamilton, D.	17
Reid, W.A.	17
Unruh, G.G.	17
Willis, G.	17
Barrow, R.	16
House, E.R.	16
Kaufman, R.F.	16
Klein, M.F.	16
Masia, B.B.	16
Robinson, F.	16
Stratemeyer, F.B.	16
Harris, W.T.	15
Oliver, A.I.	15
Anyon, J.	14
Ross, J.	14
Rubin, L.J.	14
Shipman, M.D.	14
Van Manen, M.	14
Berman, L.M.	13
Orlosky, D.E.	13
Passow, A.H.	13

(table continues)

Researcher	Frequency of Citation
Sequel, M.L.	13
Tyler, L.L.	13
Vallance, E.	13
Block, J.H.	12
Briggs, L.J.	12
Blenken, G.M.	12
Burnett, J.R.	12
Giles, H.H.	12
Guba, E.G.	12
Leithwood, K.A.	12
McCutchen, S.P.	12
Weinstein, G.	12
Zechiel, A.N.	12
Bestor, A.	11
Evans, N.D.	11
McMurray, C.A.	11
Neagley, R.L.	10
Baker, E.L.	10
Brandt, R.S.	10
Donmoyer, R.	10
Fullan, M.	10
Herrick, V.	10
Lewy, A.	10
Mann, J.S.	10
McCutcheon, G.	10
McMurray, F.	10
Sanders, J.R.	10
Socket, H.	10
Thelan, H.	10
Walker, R.	10
Albeity, E.J.	9
Bagley, W.C.	9
Barone, T.	9
Benne, K.D.	9

(table continues)

Researcher	Frequency of Citation
Berman, P.	9
Egan, K.	9
Elliott, J.J.	9
Loucks, S.F.	9
Miller, J.P.	9
Provus, M.M.	9
Trump, J.L.	9
Zenger, W.F.	9
Bowers, C.A.	8
Klohr, P.	8
Lundgren, U.L.P.	8
Maynes, F.	8
Molnar, A.	8
Oliva, P.	8
Pomfret, A.	8
Pring, R.	8
Worthen, B.	8
Zahorik, J.A.	8
Brickell, H.M.	7
Debono, E.	7
Elam, S.	7
Kerlinger, F.N.	7
Ruddock, J.	7
Silva, D.	7
Smith, L.M.	7
Van Til, W.	7
Washburn, C.W.	7
Wiles, K.	7
Wirth, A.G.	7
Benjamin, H.	6
Brubaker, D.L.	6
Burton, W.H.	6
Davis, O.L.	6
Ebel, R.L.	6

(table continues)

Researcher	Frequency of Citation
Englehart, M.D.	6
Furst, E.J.	6
Gay, G.	6
Greenweld, J.	6
Harlem, W.	6
hass, G.	6
Lavatelli, C.S.	6
Oliver, D.	6
Ponder, G.A.	6
Purpel, D.E.	6
Schon, D.	6
Shumaker, A.	6
Smith, E.R.	6
Alberty, H.B.	5
Atkins, J.M.	5
Briggs, T.H.	5
Bullough, R.V.	5
Eash, M.J.	5
Feyereisen, K.V.	5
Ford, G.W.	5
Glass, G.V.	5
Goldstein, S.L.	5
Hall, G.E.	5
Hyman, R.J.	5
King, N.R.	5
Maccia, E.S.	5
Nystrand, R.O.	5
Pugno, L.	5
Ragan, W.B.	5
Reed, J.	5
Richter, M.	5
Rudnitsky, A.V.	5
Sheppard, G.D.	5
Strike, K.A.	5

(table continues)

Researcher	Frequency of Citation
Wheeler, D.K.	5
Williams, W.H.	5
Wolfson, B.J.	5
Young, M.F.D.	5
Anderson, R.C.	4
Anderson, S.B.	4
Anderson, W.M.	4
Aoki, T.	4
Becker, T.	4
Davies, I.K.	4
Faunce, R.C.	4
Gephart, W.J.	4
Gwynn, J.M.	4
Gross, N.	4
Harap, H.	4
Hawn, H.D.	4
Hemphill, J.K.	4
Hersh, R.H.	4
Holt, L.	4
Kaislar, E.R.	4
Komisar, P.B.	4
Mazza, K.A.	4
McKibbin, M.	4
McClure, R.M.	4
Martorella, P.H.	4
McClure, J.S.	4
McNally, H.J.	4
Miller, D.F.	4
Park, P.	4
Schaefer, R.J.	4
Steeves, F.L.	4
Turner, H.E.	4
West, R.	4
Zacharies, J.	4

(table continues)

Researcher	Frequency of Citation
Ashton, P.	3
Ainsworth, C.S.	3
Alkin, M.	3
Anderson, L.W.	3
Ball, S.	3
Barnes, D.	3
Brent, A.	3
Clipsham, J.S.	3
Dahllof, U.S.	3
Fenstermacher, G.	3
Firth, G.R.	3
Forkner, H.L.	3
Frymier, J.R.	3
Gilchrist, R.S.	3
Gottesman, A.M.	3
Grady, M.P.	3
Gress, J.R.	3
Grobman, M.R.	3
Giacquinta, J.B.	3
Havenstein, A.D.	3
Hendricks, G.	3
Hooper, R.	3
Houghton, K.	3
Hultgren, F.H.	3
Kimpston, R.D.	3
McKim, M.G.	3
Meyer, W.V.	3
Miller, J.L.	3
Montgomery, D.J.	3
Murphy, R.T.	3
Musgrave, F.	3
Nisbet, S.D.	3
Noddings, N.	3
Ornstein, A.C.	3

(table continues)

Researcher	Frequency of Citation
Parlett, M.	3
Pophewitz, T.S.	3
Reynolds, T.	3
Richards, C.	3
Senech, L.	3
Synder, B.R.	3
Spears, H.	3
Steimer, W.	3
Suppes, P.	3
Weaver, R.	3
Wekert, J.J.	3
Anderson, V.E.	2
Bakken, J.	2
Banks, J.A.	2
Carey, L.	2
Dale, E.	2
Davis, F.	2
Dessart, D.T.	2
Dick, W.	2
Ennever, L.	2
Florio, D.H.	2
Glorgiades, W.	2
Goodson, M.	2
Gow, D.T.	2
Gowin, D.B.	2
Griffin, G.A.	2
Harris, A.	2
Herman, T.	2
Hunt, M.P.	2
Jemelka, R.P.	2
Jones, D.	2
Jordan, L.G.	2
Kerr, J.	2
Lawn, M.	2

(table continues)

Researcher	Frequency of Citation
Lindwall, C.M.	2
May, F.B.	2
May, N.	2
Martin, M.C.	2
Morris, B.	2
Morrison, H.C.	2
Nowak, A.	2
Nafziger, D.H.	2
Payne, D.A.	2
Penna, A.N.	2
Peters, D.W.	2
Plakos, J.	2
Plakos, M.E.	2
Pritzkau, P.T.	2
Raths, J.D.	2
Roberts, B.R.	2
Russell, H.H.	2
Shiro, M.	2
Shultz, B.E.	2
Shays, G.	2
Smith, G.	2
Speiker, C.A.	2
Taylor, P.A.	2
Unruh, A.	2
Wasserman, S.	2
Walton, J.	2
Westmeyer, J.K.	2
Weiss, C.H.	2
Weiss, J.	2
Westbury, I.	2
Wilson, L.C.	2
Andelman, C.	1
Anderson, D.W.	1
Anderson, L.W.	1

(table continues)

Researcher	Frequency of Citation
Arends, R.I.	1
Arends, J.H.	1
Barley, G.D.	1
Baker, R.L.	1
Banghart, F.W.	1
Barnes, S.	1
Baxter, R.P.	1
Becker, J.	1
Bellon, J.	1
Betcher, J.	1
Block, B.S.	1
Bernstein, M.	1
Boblick, T.M.	1
Bossing, N.L.	1
Boyd, W.L.	1
Bremer, J.	1
Brown, A.F.	1
Browne, R.B.	1
Burkett, D.	1
Bulach, C.R.	1
Bushnell, D.S.	1
Carlos, E.C.	1
Chase, J.B.	1
Clarke, D.F.	1
Connelly, M.F.	1
Cox, B.	1
Craig, D.	1
Cox, J.	1
Cyrs, T.E. (Jr.)	1
Coltham, J.B.	1
Cay, D.	1
Ciurczak, F.	1
Dagmar, F.B.	1
Doll, W.E.	1

(table continues)

Researcher	Frequency of Citation
Dothrens, R.	1
Dow, I.I.	1
Erant, M.	1
Edwards, C.H.	1
Eggleston, J.	1
Fines, J.	1
Fadimen, J.	1
Fitzgibbon, G.T.	1
Foshay, W.R.	1
Fox, S.	1
Fraser, B.J.	1
Frey, K.	1
Goel, M.	1
Garcia, R.L.	1
Garman, N.	1
George, A.A.	1
Gerlach, V.S.	1
Golby, M.	1
Gold, L.	1
Goodson, I.	1
Graves, N.	1
Green, T.	1
Hagen, O.A.	1
Haggerson, N.	1
Hall, S.B.	1
Hancock, J.R.	1
Haulenstein, H.D.	1
Hegarty, H.	1
Hedges, H.G.	1
Hosford, P.L.	1
Huenecke, D.	1
Hug, W.E.	1
Hawson, G.	1
Jacobs, J.	1

(table continues)

Researcher	Frequency of Citation
Janesick, U.J.	1
Kissock, C.	1
Kalsoumis, T.	1
Kemmis, S.	1
King, C.	1
Kirst, W.G.	1
Love, J.H.	1
Locefield, W.E.	1
Larson, R.	1
LeBaron, W.	1
Lee, D.W.	1
Lee, J.M.	1
Levit, M.	1
Litrell, J.H.	1
Lowenthal, R.	1
Lister, P.	1
Maker, J.	1
Macagnoni, V.	1
Marks, W.L.	1
Marshall, A.R.	1
Marback, E.S.	1
McNeff, M.O.	1
Melton, R.F.	1
Metcalf, L.E.	1
Moore, W.J.	1
Murphy, R.T.	1
Morris, L.L.	1
Nucci, L.	1
Ochos, A.S.	1
O'Connor, D.J.	1
Pegano, J.	1
Patton, M.W.	1
Pereira, P.	1
Prescott, W.	1

(table continues)

Researcher	Frequency of Citation
Roderick, J.A.	1
Roberts, A.	1
Rogers, F.	1
Romiszowski, A.J.	1
Roby, T.W.	1
Rutherford, W.L.	1
Seigle, D.M.	1
Seller, W.	1
Shapiro, S.B.	1
Skeel, D.T.	1
Snedden, D.S.	1
Sirorski, L.A.	1
Starratt, R.J.	1
Steiner, R.	1
Sullivan, E.V.	1
Tanner, K.	1
Trull, A. (Jr.)	1
Turney, D.	1
Tones, G.	1
Van Every, D.F.	1
Verduin, J.R.	1
Van Moschzixher, M.	1
Watts, J.	1
Webster, W.J.	1
Welton, J.	1
White, F.	1
Whitehead, A.N.	1
Whitehead, R.Y.	1
Willis, M.	1
Wise, A.E.	1
Wolf, R.L.	1
Worthen, B.	1
Zaltman, G.	1
