

Managing and Monitoring Literacy for a 'Knowledge Society':
The Textual Processes of Inequality in Adult Education Policy,
Pedagogy and Practice

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Abstract

This thesis explicates how an international literacy testing (ILT) initiative, overseen by the Organization for Economic Cooperation and Development (OECD), is put to use to coordinate teaching and learning in adult literacy education programs in Canada, and in Ontario in particular. The testing initiative was conceived to manage and monitor global literacy resources, and promote their development for economic productivity and competitive advantage. Guided by institutional ethnography, the analysis reveals how certain operational and support devices of the testing initiative have been transposed into the context of adult education and training, carrying with them the ideological concerns of the economistic testing project and some of its methodological procedures.

Various devices and technologies of the ILT are reformulated as individual assessments for adult learners, and are also incorporated— as is and with extensions— into a national occupational skills framework, a provincial curriculum reform, and a series of policy persuasion projects. Educators, program coordinators and curriculum developers, concerned with the development of literacy that is responsive to learners and their aspirations, recognize the limitations of the curricular frameworks and assessments. They devote inordinate amounts of time and effort reformulating, translating, force-fitting, and supplementing them. At the same time, a narrowly conceived locating information pedagogy—distinct from both academic literacy needed to access formal education systems and a responsive and situated literacy needed to actively participate in social practices—is developed and widely promoted. Policy entrepreneurs have incorporated the devices into their policy persuasion projects, including a project that profiles adults according to their literacy proficiency, their value in the labour market and whether or not they are ‘economically efficient’ to educate. Persuasion tactics are aimed at policy-makers and adult educators in order to convince them to shift educational support away from those who already experience limited access to educational opportunities (adults with secondary education or less) to those closest to reaching what is deemed to be an acceptable literacy level (adults with post-secondary education). Attempts to limit and privilege the purpose of adult education and training, in combination with the development of curricula and assessments that do the same, obstruct and contradict efforts to support equitable literacy learning opportunities for Canadian adults.

Key words: international literacy testing, institutional ethnography, adult education, literacy pedagogy, curriculum development, policy analysis, education inequality

Contents

Acknowledgements	ii
Abstract.....	iii
List of Tables.....	vii
List of Figures.....	vii
Acronyms and Use of Terms in Analysis	viii
1. Introduction and Overview	1
Grounding the Investigation in Experience	3
Shifting Accountability Concerns in Ontario Adult Literacy Programs	5
Deciding What to Measure and How to Measure	8
Overviews.....	10
Analytical Overview and Mapping: Sequences of Textual Coordination	11
Thesis Overview: Development and Use of the Devices and their Impacts	18
2. Context of Program Accountability and the ILT Initiative	22
How Program Accountability Work is Accomplished and Its Impacts	23
Overview of the International Literacy Testing Initiative.....	28
Positivist Perspective and Claims of Objectivity	31
Neo-Liberal Ideology: Literacy for a Knowledge Society and Competitiveness	33
Conflicting Conceptualization, Definition and Operationalization of Literacy.....	35
Missed Policy Development Opportunities.....	37
Conclusion: The Need to Examine the Intersection of Large-Scale Testing and Accountability ...	41
3. Using Institutional Ethnography to Investigate the Transposition of the ILT into Policy, Pedagogy and Practice	43
An Ontology of Ruling Relations	43
The Ruling Relations of Literacy for a 'Knowledge Society'	44
Methodological Concepts Used in the Analysis	48
Experience and Work.....	48
Texts, Discourse and Textual Coordination	49
Completed IE Analyses that Inform this Study	53
Regulatory Frame of Competency-based Curriculum Development	58
Data Collection	63
Interviews.....	64
Participant-observation	66
Collected Documents	67
My Experiences.....	67
Data Analysis	68
Accuracy	69
Study Limitations.....	70
4. Designing and Using a Test of Cognitive Processing	72
Principles of Item Response Theory Used to Develop Test Tasks	74
Critique of the Response Probability Value.....	76
Constructing Difficulty and the Locating Information Model	77
Complex Scoring Protocols Activate the Locating Information Model	82
How IRT and the Locating Information Model Operate in a Test Task	85
Critique of the Test Tasks and their Prescriptive Model of Thought and Action.....	88

Development of Spin-off Tests for Program and Individual Use	92
Unfair Testing Practices Using ILT Spin-offs: Doing PDQ.....	95
TOWES: A Barrier to Developing Workplace Partnerships	102
TOWES: Disconnected from Curricular Aims and Confusing Results	104
Summary.....	106
5. Constructing and Using the Essential Skills.....	109
Developing Competency Statements Using ILT Level Descriptions	111
A Competency Framework for 'Entry-level' Work.....	114
The Development, Use and Learning Impacts of Occupational Task Analysis.....	123
Profiling Work and the Development of Task Analysis Expertise	125
Extending the Occupational Task Analysis Process.....	128
Essential Skills Critiques	129
Getting Hooked into Using the Essential Skills	133
A Common Language for Whom?	135
Ineffective Use of Time and Resources to Make Sense of the Essential Skills	136
Barrier to Program Development and Employer Partnerships	140
Unable to Support Educational Connections.....	142
Locating Information Instructional Strategy.....	145
Summary.....	148
6. Developing and Implementing the Ontario Adult Literacy Curriculum Framework. 150	
Development of the OALCF	151
How ILT Texts and Task Analysis Play Out in the OALCF	157
Locating Information Skill Domains Restrict Reading	159
Figuring Out the Competencies and Task Groups	161
Level Descriptions and the (Non)Operation of the Levels.....	164
Level Descriptions and Test Task Model Used to Create Assessments.....	166
Teaching Educators a Literacy Task Analysis Pedagogy	171
Two Distinct Models of Testing and Curriculum	173
Contradictory and Distinct Assessments for Accountability.....	176
An Inequitable Performance Management Framework.....	178
Attempting to Address Concerns	183
Summary.....	184
7. Directing Education Policy and Developing Pedagogy	189
A Level Implications Scheme to Direct Policy Attention	191
Critiques of the Level 3 'Suitable Minimum'	194
Discursive Manoeuvres and Assumptions in the Level Implications Scheme	196
Appeal of the Level 3 'Suitable Minimum'	198
PDQ Test Results and the Level Implications	199
Influencing Policy: Report Trilogy.....	203
Critiques of the Reports	206
Interactive Map: A Policy Persuasion Device	208
Profiling Learners and Appraising Educational Efforts	212
Taking Action with <i>TOWES Prime</i>	218
TOWES Scaffold Overview: Using Item Response Theory for Instruction	221
Demonstration Studies	229
Summary.....	230

8. Conclusion and Making Changes	233
ILT Devolved Assessments	233
ILT Devolved Curriculum Frameworks and Learning Objectives	235
ILT Devolved Instruction	237
Overhauling Programs and Policy Persuasion	237
Policy-Makers and Regulated Policy Work	238
Research Contributions	242
Connecting with Educators and Curriculum Developers	245
Possible Extensions	247
References	249
Appendix A: Listing of Outcomes Development Initiatives in Ontario	269
Appendix B: National and International Literacy Testing Initiatives	271
Appendix C: Ethics Approval, 2009-2010	273
Appendix D: Ethics Approval, 2010-2011	274
Appendix E: Ethics Approval, 2011-2012	275
Appendix F: Complete Set of ILT Level Descriptions (IALS, ALLSS)	276
Appendix G: Complete OALCF Framework	278

List of Tables

Table 1: Procedures and Questions to Construct an Intertextual Curricular Device	62
Table 2: Role of Informants and Interview Formats	64
Table 3: ILT Scoring Protocols and Level Description for Level 1 Prose Test Tasks	112
Table 4: ILT Level Descriptions for Levels 1 and 2.....	113
Table 5: Level Descriptions and Essential Skills Complexity Ratings.....	118
Table 6: ILT Scoring Categories Compared to Writing Complexity Ratings	119
Table 7: ILT Prose Level Descriptions and ES Reading Complexity Ratings	121
Table 8: From Scoring Protocol to Level Description to Complexity Rating	122
Table 9: Essential Skills Domains and Interpretations for Family Literacy	137
Table 10: ES Domains, Sub-Domains and OALCF Competencies, Task Groups	156
Table 11: Competencies and Task Groups in the OALCF	160
Table 12: ILT, ES and OALCF Reading Development Indicators at Level 1	164
Table 13: Complete Set of OALCF Reading and Writing Development Indicators.....	167
Table 14: Distinct Approaches to Testing in the OSSLT and OALCF	176
Table 15: LBS Assessment Scheme	177
Table 16: Literacy Program Performance Measures	179
Table 17: Level Implications Scheme Devised for the IALS and ALLSS	192
Table 18: Level Implications and PDQ Results Report	200
Table 19: Key Aspects of the Segmentation Analysis	213
Table 20: ILT Scoring Sub-Categories and Learning Task Indicators	224
Table 21: Example of Learning Task Question/Answer Process.....	227

List of Figures

Figure 1: Sequences of Textual Coordination from the ILT into Policy and Curriculum	12
Figure 2: Overview of the ILT Initiative.....	29
Figure 3: ILT Item Response Model	75
Figure 4: Preliminary Model of Difficulty.....	78
Figure 5: Five Stage Locating Information Model.....	80
Figure 6: Scoring Protocol for Prose Processing.....	84
Figure 7: Medicine Label Test Task.....	86
Figure 8: Example PDQ Test Task	97
Figure 9: Interactive Map Screen Shot.....	208
Figure 10: The Item Response Model and Literacy Learning Model	223

Acronyms and Use of Terms in Analysis

ALLSS Adult Literacy and Life Skills Survey	Second of three international literacy assessments conducted in the mid 2000s.
CCL Canadian Council on Learning	Federally funded non-profit organization created to support education policy development from 2001 until 2011.
ESDC Employment and Social Development Canada	Federal ministry that oversees labour force related initiatives and policy development including the Essential Skills and Office of Literacy and Essential Skills (formerly Human Resources and Skills Development Canada).
EO Employment Ontario	A collection of provincially operated employment related services and initiatives within the Ministry of Training, Colleges and Universities, including those related to adult literacy education.
ES Essential Skills	A federally developed occupational skills framework that articulates work activities involving literacy and numeracy to the ILT levels, level descriptions and skill domains.
ETS Educational Testing Service	A non-profit test development organization located in Princeton, New Jersey that developed the test tasks used in all international adult literacy tests.
IALS International Adult Literacy Survey	First of three international adult literacy tests conducted in the early 1990s.
IE Institutional ethnography	Methodological and theoretical approach used to guide the analysis.
ILT International literacy test(ing)	General term used to describe the series of assessments carried out by the OECD.
IRT Item response theory	Test development framework and approach used to guide the development of the literacy tests.
ISRS International Survey of Reading Skills	A supplemental assessment conducted in Canada with adults who had previously taken the ALLSS. The assessment was comprised of a series of word recognition tests designed to indicate why adults at Levels 1 and 2 did not have 'proficient' skills.
LAMP Literacy Assessment and Monitoring Program	An adult literacy testing initiative for non-OECD countries that uses the same methods and approach established by the OECD initiative. The assessment program is overseen by UNESCO, the United Nations Education, Scientific and Cultural Organization.
LBS Literacy and Basic Skills	Provincially funded adult literacy education system in Ontario.

LSUDA Literacy Skills Used in Daily Activities	A precursor to the international literacy test conducted in Canada. The test demonstrated that the testing approach and methods could be adapted for different languages.
MTCU Ontario Ministry of Training Colleges and Universities	The provincial ministry that funds and operates adult literacy education in Ontario.
NALS National Adult Literacy Survey (US)	One of precursor tests to the ILT conducted in the US (where the test was developed). Important operational and support devices such as the levels and level descriptions were established with the NALS.
NOC National Occupation Classification	A detailed categorization of occupations used for labour market research, policy development and information purposes. The Essential Skills was designed to work with the NOC by providing listings of job skills for occupations that don't require an education or training credential.
NPM New public management	An approach to the management of public services premised on the development of managerial systems and measures designed to improve 'effectiveness' and 'efficiency'.
OALCF Ontario Adult Literacy Curriculum Framework	Ontario's new adult literacy curriculum and assessment protocol devised for accountability purposes.
OECD Organization for Economic Cooperation and Development	An international think tank that supports the development of policies designed to promote economic growth amongst its member countries.
OLES Office of Literacy and Essential Skills	A department within Employment and Social Development Canada that provides funding for projects and initiatives that incorporate, promote and develop the Essential Skills and related ILT.
OSP Ontario Skills Passport	A collection of employment related resources and self-assessment tools for students (including adults) developed by the Ontario Ministry of Education. Most tools and resources incorporate the Essential Skills.
OSSLT Ontario Secondary School Literacy Test	A literacy test administered by the province to all secondary students in Grade 10.
PMF Performance Management Framework	The mechanisms and related performance measures used for accountability purposes in order to allocate and monitor funding.
PDQ Prose, Document, Quantitative	A US based spin-off test constructed using the same methods as the international literacy tests.
PIAAC Program for the International Assessment of Adult Competencies	The third round of international literacy testing that is currently underway. Initial results were released in October 2013.
TOWES Test of Workplace Essential Skills	A Canadian based spin-off test constructed using the same principles and processes as the international literacy tests.

1. Introduction and Overview

This thesis examines the transposition and impacts of methods and constructs devised for an international literacy testing (ILT)¹ initiative into adult literacy education policy, pedagogy and practice in Canada, and particularly in Ontario. Canada has played a leading role in the development and implementation of the testing initiative over the past two decades. The transposition of the ILT into program assessments, curriculum frameworks, a curricular reform, policy directives and instructional materials has been mostly a Canadian project thus far. The central aim of the investigation was to discover how and why this has occurred by first uncovering and analysing the specific aspects of the testing initiative that are being put to use, and then tracing their transposition. The crux of the analysis explicates the use of the devices by educators, program coordinators and curriculum developers who develop and implement ILT derived assessments and curricula, some of which are mandated. The devices are also examined in the context of educational policy development. The work of a small group of policy entrepreneurs, one of whom was instrumental in the testing project, is focused on a comprehensive overhaul of adult literacy education.

1 What I have come to call the ILT initiative is a series of international literacy tests and accompanying questionnaires for working-age adults that began in 1994 and continues today. The initiative has involved three rounds of testing: 1) the International Adult Literacy Survey (IALS); 2) the Adult Literacy and Life Skills Survey (ALLSS); and 3) the Program for the International Assessment of Adult Competencies (PIAAC), which is currently underway. I have chosen to use the term international literacy testing/test(s) (ILT) to cover all three rounds of testing, all of which employ the same approach to testing, which is the focus of analysis.

The investigation is guided by institutional ethnography (IE) and draws on several of its analytical concepts to direct attention to the way texts, and complex textual devices and technologies, are put to use within an institutional arrangement. The ILT and its related textual devices and technologies that are then transposed into adult literacy education constitute the institutional arrangement, an arrangement designed to manage and monitor literacy for a ‘knowledge society’. The textual devices examined, such as ILT test tasks, spin-off tests, level descriptions and level implications are active coordinators of institutional discourse and ideology. They activate the ILT methodology and approach to testing, and carry through (Darville, 1995) its ideological aims—ensuring the ‘quality’ and ‘expansion’ of literacy resources in the population for economic growth.

Once incorporated into accountability measures and mechanisms, such as assessments, competency-based curriculum frameworks and performance management frameworks, the ILT devices reformulate teaching and learning knowledge and practice so that it becomes recognizable and measurable within the institutional arrangement. Re-organizing learning in this way means that it is receptive to managerial processes (Jackson, 1988). This happens when literacy knowledge and skills are parsed and abstracted to conform to assessments, curriculum, and managerial frameworks. In their abstracted and parsed form, they obscure and distort the development of literacy that is situated, particular and responsive to the complexities of learners’ lives. They are however recognizable to those whose concern is to manage and monitor. Curricular devices such as the Essential Skills, Ontario Adult Literacy Curriculum Framework and assessment devices such as the Test of Workplace Essential Skills may be useful to policy-makers because they are an abstraction from reality, able to connect to

international conversations about skills, and support large-scale descriptions of populations (not individual people) (Jackson, 2005). However, this very abstraction is not so useful to educators who are working with actual people in specific programs and workplaces (ibid.). “[T]he abstract categories...which work well to make skills administrable as part of a policy process may not work very well in making everyday skills teachable, learnable, usable, and eventually transferable in real working environments” (p. 18).

Policy-makers may not be aware of the challenges and impacts that play out when educators and learners attempt to make sense of and use various ILT derived devices as part of mandated accountability processes. Although educators are closer to the impacts, they may not be able to figure out and articulate instances of confusion, frustration and even anger, as they grapple with unfamiliar and unrecognizable textual processes and devices that claim to be able to support their pedagogical work. This is why this study and its methodological approach are so important. The completed analysis can be used to articulate concerns, to explicitly identify ineffective, inequitable and perverse uses of the ILT derived devices in the context of adult literacy education, and to provide the evidence needed to work towards making changes.

Grounding the Investigation in Experience

During the nearly two decades that I worked in Ontario adult literacy programs I witnessed a gradual encroachment of the use of specific aspects of an international literacy testing (ILT) initiative in policy and accountability directives. What started as seemingly innocuous eligibility indicators and general level alignments gradually turned into a comprehensive and pervasive assessment and reporting system.

I first heard of the international testing initiative in the mid 1990s when results of the International Adult Literacy Survey (IALS) were released. Surprising and perplexing statistics were reported in the media: 48% of Canadians have a literacy problem! Soon after, literacy advocacy and support organizations began to re-circulate the statistics, seeing them as an opportunity to generate greater support for literacy programs and adult literacy in general. The organizations gradually incorporated the compelling results, the ILT's definition of literacy, and its concerns about the relationship between literacy and a range of social, and especially economic factors, into their promotional materials. The texts then made their way into programs in the form of literacy fact sheets and bulletins. Aspects of the testing initiative began to appear in provincial program policy documents a few years later.² Two of the five ILT levels were referenced to indicate an alignment with provincial elementary and secondary grade levels, and literacy system levels in a provincial curriculum framework³ document (Literacy and Basic Skills Section Workplace Preparation Branch Ministry of Education and Training, 1998). In addition, a set of operational guidelines for programs framed eligibility criteria using the levels:

2 A recent report documents how aspects of the ILT such as its definition of literacy, levels and spin-off assessments are referenced in policy documents in each province (Centre for Literacy, 2013). The report is a "descriptive overview" and does not analyse the way the texts are used to coordinate policy and curriculum projects and subsequent impacts. My description of the way the levels are referenced in the provincial literacy program eligibility criteria is aligned with some of the ways that other provinces have incorporated the ILT into education policy documents. To date, Ontario is the only province to have mandated the use of an ILT derived curricular and assessment system.

3 Although the LBS system did not traditionally use the term curriculum framework, sets of learning standards and outcomes, organized by learning domains across a hierarchical system did indeed operate the same way as a curriculum framework.

Adults whose literacy skills fall within Levels 1 and 2 of the International Adult Literacy Survey (IALS) are the primary focus of the program. IALS levels are used to determine the client group because IALS is the internationally recognised framework for establishing literacy skill levels. (Reading the Future: A Portrait of Literacy in Canada, Statistics Canada, 1996)” (Literacy and Basic Skills Section Workplace Preparation Branch Ministry of Education and Training, 2000, p. 7).

At the time, this sort of seemingly innocuous use of the levels was easily shrugged off. The levels had nothing informative or useful to offer to me as an educator. If provincial bureaucrats seemed to think they were useful, so be it, as long as I didn’t have to actually use or make sense of them. Literacy programs used a separate levelling system called LBS outcomes. They were challenging enough to interpret and use without adding an additional system into the mix.

Shifting Accountability Concerns in Ontario Adult Literacy Programs

From my perspective, working in a provincial literacy program, the ILT seemed to remain in the background during a period of increasing and changing accountability demands from 1998 onwards. Over this period, the accountability emphasis gradually shifted from activity measures to program outcomes measures. As concern shifted, there was a need to find, adapt and devise the measures that would be used.

There have been and continue to be three main areas of accountability in Ontario literacy programs:

1. Financial accounting and audits;
2. Program activity (i.e. enrollments, daily attendance and contact hours, length of time in program); and

3. Program outcomes (literacy development progress, goal achievement, exit status and follow-up status, student satisfaction, referrals to programs).

Over the years, the financial aspect remained stable and predictable: account statements were carefully compiled, receipts and invoices dutifully collected, and yearly audits were performed. For most of my time working in programs, funding was allocated based on program activity, specifically the number of students in a program and their contact hours (i.e. the amount of time they attended a program). It was a straightforward but an inflexible measure. If, for example, a program experienced an increase in enrollments, additional funding was not available to accommodate the increase. Programs then created wait lists. At the same time, programs were discouraged from ever showing a decrease in activity, which would indicate they were unable to meet their targets. Our program, unlike many others, didn't experience substantial enrollment fluctuations. We also used the measures to our advantage. The contact hours of students with regular attendance could be used to offset and obscure poor attendance of other students, many of whom were dealing with complex and challenging circumstances, living in poverty and relying on social assistance.

As an inflexible measure that couldn't be used to adjust funding levels, the accountability mechanism became ineffective. A process called 'business planning' that was attached to the measure was subsequently not taken seriously. To complete the 'business plan', I worked with the program manager to predict our student numbers for the upcoming year, making sure not to show a substantial decrease, and knowing that increases would not be accompanied by extra funding. Then, we had to break down the student numbers by goal and level. In other words, we had to predict how many students would have an

employment goal, and how many students would be assessed at one of five levels. The predictions were impossible to make, so we simply based numbers on our current enrollment information. Overall, it was a perplexing and frustrating process. Not surprisingly, many program coordinators expressed dissatisfaction with the accountability mechanism.

The mechanism also came under scrutiny in a provincial audit. Auditors stated that they were concerned with the number of LBS programs in the province that used all of their allocated funding without achieving their predicted targets. While not achieving targets may have been a result of a perplexing business planning process, it may have also been related to years of stagnant funding. From the mid 1990s, when the LBS system was established, until the auditor's review in 2007-2008, programs had never received an overall funding increase to offset increasing operation costs, including salary increases negotiated in collective agreements. It was costing programs more to work with the same number of learners. To offset rising costs, programs often cut program durations and weekly hours, which would decrease their contact hour targets. Rather than investigate reasons that programs were not achieving targets, the auditor recommended the implementation of "a funding model that recognizes learner outcomes and better matches funding to service levels provided" (Office of the Auditor General of Ontario, 2008, p. 262). A provincial curriculum consultant described the context in which the auditor's report appeared:

They [the provincial auditors] were slamming them [the LBS policy staff] for providing money to programs that didn't meet targets... There were all sorts of reasons. But it never mattered. Everyone knew that the targets were meaningless, and you'd still get funding.

During a later period when I worked with ministry policy-makers on the Ontario Adult Literacy Curriculum Framework (OALCF) project, I learned that the auditor's report became the catalyst that was used to make the shift from using program activity measures to using program outcomes measures in order to allocate funding. Program policy staff would need to figure out how to provide program outcomes measures. This was not a new challenge but an on-going one in the LBS system.

Deciding What to Measure and How to Measure

Over the years that I worked in Ontario literacy programs continual curricular adjustments and changes were made in the effort to find ideal measures of learner progress and program outcomes. Curriculum standards and learning objectives were developed, changed and redeveloped, and various processes for recording and documenting—proving that progress was being made and outcomes were being met—were implemented. As a result, Ontario has a reputation for having a highly systematized approach to the development and delivery of literacy education (Grieve, 2002; Shohet, 2001). I experienced seven outcomes development initiatives, and actively participated in the development of two of the initiatives, including the OALCF project. A complete listing of the initiatives (appearing in Appendix A) demonstrates that outcomes-based accountability requirements were becoming more time-consuming, more directive and more pervasive over the years. Programs were monitored annually to ensure that the outcome measures were incorporated into documents; to ensure that the record-keeping documents, namely a training plan, conformed to the requirements established by the ministry; and to ensure that programs were meeting their targets related to numbers of students enrolled, the assessed levels of students, contact hours, initial goals of students

and goals achieved. Although outcome measures were audited, funding was based only on enrollment and contact hours.

What was frustrating about this work for me as an educator is the way that the personal experience of the learner and actual, meaningful learning accomplishments had to be reformulated and force-fit into the various outcome schemes, all of which included various formulations of skill domains, levels, learning objectives and goal statements. Learning that was not reformulated was not recognized as an accomplishment in the system. For example, some learners in the program participated in courses that led to a certification for first-aid, CPR and food safety. The certifications were recognized and valued by employers and the learners. The meaningful and relevant evidence of their accomplishment was the certificate itself and an overview of the content of the course. To make this learning count, it had to be re-constructed so course content could be related to the skill domains, and levels of the current outcomes framework in use. At one point, during a program monitoring visit, I was told not to include the certificates and course outlines in the audited training plan and accompanying student portfolio because it wasn't apparent how they demonstrated learning achievements. Further, increased demands for accountability were never accompanied by increased funding for resources and educator training, except to learn about new accountability demands. This was occurring as programs struggled to operate after 15 years of zero funding increases. The accountability demands we experienced, similar to those experienced by others, were simply "intensifications of procedural activities to document outcomes, and were not necessarily aimed at altering (or improving) existing practices" (St. Clair & Belzer, 2007, p. 173).

The most recent attempt to develop program outcomes, the OALCF, was a sweeping and comprehensive curricular reform. The intent of the reform was to directly connect funding decisions to program outcomes, that is, the ‘quality’ and ‘performance’ of programs based on learner ‘progress’ and literacy ‘gains’. While other measures are also to be used, it is the outcomes measures that will have the greatest impact on educators and learners, and their day-to-day teaching and learning work. To devise the new outcomes measures policy-makers turned to the ILT and a related job skills framework called the Essential Skills, which incorporates aspects of the testing initiative. Until the OALCF, the literacy system had relied on the provincial secondary school curriculum to construct various outcome measures and curriculum frameworks. Use of large-scale testing constructs and processes to inform a learning curriculum is a markedly different approach to curriculum development in the literacy system. Accompanying the curriculum framework is a set of mandated assessments used to produce many of the outcomes measures. The OALCF also marks the first time that specific assessments have been mandated. The final element is a new database and reporting system that entrenches the outcomes measures into program operations, such as student registration and program planning processes.

My working experience of these changes was the impetus to begin my investigation into the way that the ILT has been transposed into adult literacy programs, reorganizing day-to-day teaching and learning.

Overviews

The analysis is complex and inter-related. I have developed two overviews that work together, but describe the analysis from two organizational perspectives. The first

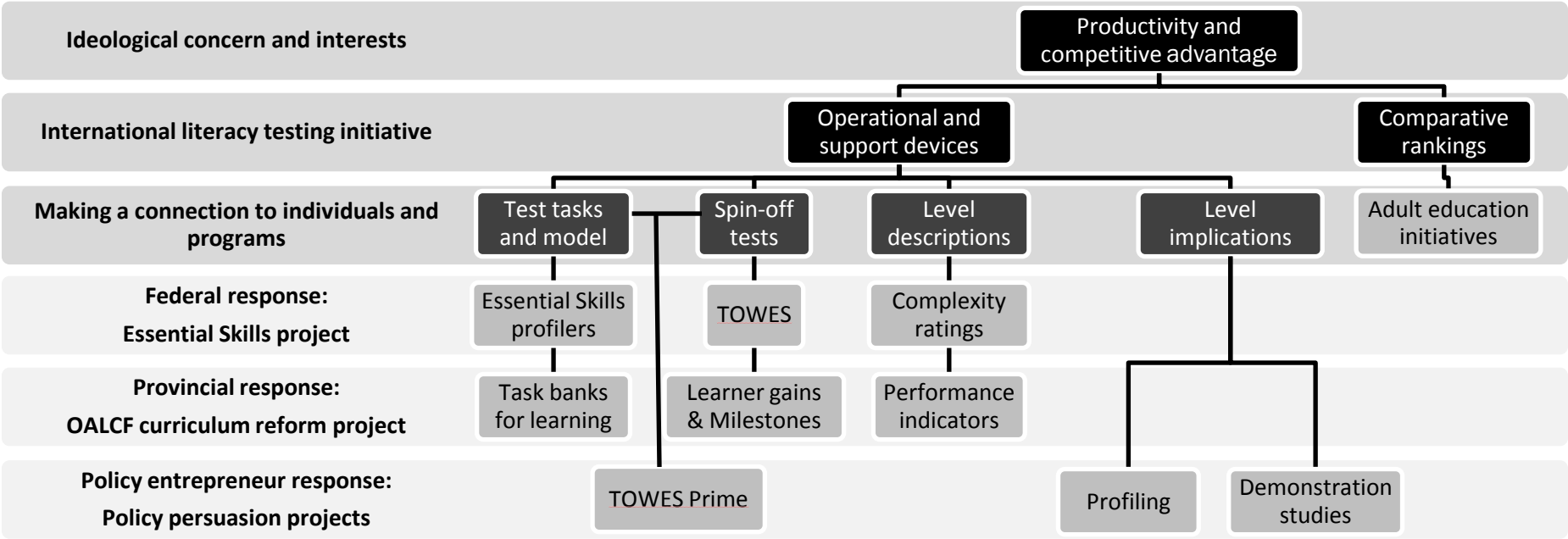
overview is a mapping of the sequences of textual coordination. It illustrates (Figure 1) and describes how particular aspects of the ILT, the textual devices and technologies, are transposed into the context of adult literacy education. The second overview describes the organization of the thesis and the unfolding of the analysis. Each of the four empirical chapters focuses on different aspects of the mapping. The first of four empirical chapters focuses on the way the test has been reformulated for program and individual assessments. The second focuses on the development and use of a federal competency-based job skill framework—the Essential Skills. The third empirical chapter examines the way the devices are put to use in a provincial curriculum reform project—the OALCF. The final empirical chapter focuses on the use of particular ILT derived devices to direct adult literacy education policy. In addition, the thesis overview section highlights supporting chapters: the conceptual underpinnings and related methodology informed by institutional ethnography; a chapter that describes a broader context for the intersecting concerns of this study related to accountability and the ILT initiative; and finally, conclusions and implications.

Analytical Overview and Mapping: Sequences of Textual Coordination

The OECD (in partnership with Statistics Canada, and now independently) has overseen an international literacy testing initiative for working-age adults for the past two decades. Three rounds of international testing have been initiated: 1) the International Adult Literacy Survey (IALS) in the mid 1990s; 2) the Adult Literacy and Life Skills Survey (ALLSS) in the mid 2000s; and 3) the Program for the International Assessment of Adult Competencies (PIAAC), currently underway. Canada has played a leading role in the initiative since its inception and even previous to the first international test. The first two

Figure 1: Sequences of Textual Coordination from the ILT into Policy and Curriculum

1



international tests were managed by Statistics Canada in partnership with the OECD. A precursor test administered in Canada demonstrated that the testing technology could be adapted from English to another language, an important aspect of the development to support the use of the test internationally.

Productivity and Competitive Advantage. The initiative is a response to concerns that working-age adults will need to depend on their cognitive abilities in order to be more competitive in a labour force that is becoming increasingly dependent on ‘knowledge’ and ‘knowledge work’. The term ‘knowledge society’ is borrowed from the title of one of the reports released after the IALS, the first international survey: *Literacy skills for the knowledge society: Further results from the International Adult Literacy Survey* (OECD and Statistics Canada, 1997). The testing technology is the actualization of ideology, an ideology that is alternatively referred to as neo-liberal. As an IE project, the analysis is concerned with the way in which abstract notions of neo-liberalism and a ‘knowledge society’ are realized in particular projects and initiatives. It is the testing technology and its related devices that provide the material and technical realization of the operation of a ‘knowledge society’.

Comparative Rankings. The most recognizable device produced by the ILT are the various ranking tables, graphs and charts used to display results using the five ILT levels and median test task scores. The ranking devices produced by the OECD compare results between participating countries. In addition, individual countries may or may not release their own reports that describe results in relation to their populations and particular sub-groups. Once the first results were released, countries responded in various ways to the results that indicated surprisingly high proportions of people were not deemed to have

‘adequate’ literacy skills to participate in a ‘knowledge society’. Some responses included the comprehensive development of adult education initiatives. Although of interest, particularly in a comparative analysis, these responses are not examined in this study. Also not examined are other measures included in the ILT, such as questionnaires about literacy use and general skill use and component or supplementary tests for adults who are not able to complete test tasks at Level 1. The focus of this analysis is on the operational and support devices.

Operational and Support Devices. Canada is the only country to have turned to the ILT’s operational and support devices in order to construct responses to the results. This work has been accomplished in three projects: 1) the articulation of occupational skills to the ILT in the Essential Skills framework; 2) a provincial curriculum reform, the OALCF; and 3) various policy persuasion activities.

Test Tasks and Model. To measure literacy across languages and cultures, the OECD used an existing testing technology that was developed at Educational Testing Service (ETS) in the 1980s. The test itself is a series of test tasks. Each task emulates textual formats and documents that an adult could possibly encounter in day-to-day life, such as a set of instructions, a transit schedule, a floor plan, etc. The topics usually address employment and the management of day-to-day activities. The texts and the test questions that accompany them use printed, graphical and numerical information as a stimulus to elicit specified cognitive and computational processes for measurement purposes.

The development of the test task is guided by item response theory. In accordance to the main principle of the item response approach, the focus of test development is on

producing test tasks that perform in predictable ways. Complex psychometric procedures and modelling in a process called ‘scaling’ are used to ensure the predictable operation of the test tasks. Individual ability is not measured. Rather, the performance of each test-taker is aggregated in order to produce population results. Further, individual performance is subject to a response probability indicator that is used to control the chance that a correct response was not the result of guessing. Depending on the number and consistency of correct/incorrect responses, in combination with the likelihood that the answer was not obtained by guessing, test-takers proceed in the testing situation with more difficult tasks. Once individual performances are aggregated, results are expressed in relation to the difficulty of the test task, and not the skill level of an individual. One can say that a population or sub-group can successfully complete tasks at one of the five ILT levels, or can successfully complete tasks that have certain median scores. People are always measured *against* the scale and ‘perform at’ various points on the scale.

Further, although literacy, and more specifically, a narrow set of reading and computation skills are called upon to respond to the test, the test tasks are not designed to determine the presence and use of specific reading and computational skills. In other words, the test is not concerned with measuring reading skill development, however it may be defined (i.e. as vocabulary, decoding, comprehension strategies, use of grammar structures, etc.). Instead, the tests are designed to stimulate a series of cognitive processes aimed at ‘identifying’, ‘locating’ and ‘matching’ specific bits of information. Contrary to the way the tests are often promoted in OECD and related country-specific reports, the test tasks are not ‘authentic’ to the ways an individual reads and responds to similar texts in day-to-day life, even when searching for bits of information. Highly complex scoring protocols

are used to elicit sets of pre-determined cognitive processes for measurement purposes that are not activated in the same way when reading outside the testing situation.

In addition to the test tasks, three related devices of analytical interest were developed within the ILT initiative: 1) spin-off tests, 2) level descriptions, and 3) level implications.

Spin-off Tests. To convince adults to recognize and respond to their potential literacy 'challenges', and to provide programs with a tool that can be used to demonstrate such 'challenges', spin-off tests were created by test developers and psychometricians who worked on the international literacy test. To date three spin-offs have been developed:

Prose, Document, Quantitative (PDQ) for US use; TOWES (i.e. the Test of Workplace Essential Skills) for Canadian use and *Education and Skills Online* for international use.

In addition to helping adults recognize and respond to their 'challenges', the spin-off tests mimic the operation of the international test, providing educators with a working model of the ILT that can be reformulated to create learning activities and informal assessments in programs. Also supporting the development of educator expertise in using the general principles and processes of the test development methods are certification and training programs.

Level Descriptions. To explain the unique operation of the ILT test tasks and provide some sense of the abilities used by test-takers to complete test questions, a set of level descriptions were created by test developers. They describe how the test tasks become more complex and difficult for the test-taker across five levels of difficulty and three skill domains: prose, document use and numeracy. The organizational format, comprised of domains and levels, is similar to a rubric or curriculum framework. Further, the

statements that describe each level of difficulty within a particular domain are similar to sets of learning outcomes statements.

The level descriptions and spin-off tests were used in both the Essential Skills framework and the OALCF. Both are competency-based frameworks used to demonstrate and measure learning for program accountability purposes and the management of adult literacy programs, work training programs and literacy-related projects. Once the testing devices and spin-off tests are incorporated into curriculum frameworks and related program and project management frameworks educators are compelled to use them. Their use is also supported by federally and provincially funded educator training and the development of support materials.

Level Implications. This device is a set of brief statements that correlate each of the ILT levels with assumed socio-economic implications for individuals. The most recognized and influential statement is a declaration that Level 3 is a ‘suitable minimum’ level of proficiency for all adults in a ‘knowledge society’. The device was created by test managers at Statistics Canada to mobilize educational policy-makers so they would develop initiatives aimed at improving test results. The device is not included in reports related to the third round of testing (PIAAC) because it was deemed to be an unsubstantiated interpretation of results by current OECD test managers. However, the legacy of the ‘suitable minimum’ remains in PIAAC reporting and can be seen in graphs that display ‘acceptable’ results (Levels 3, 4 and 5) on one side of a solid line and ‘unacceptable’ or ‘problem’ results (below Level 1, Levels 1 and 2) on the other side.

In an effort to incite policy-makers and draw attention in general to address Canada’s literacy ‘problems’ Canadian policy entrepreneurs used the level implications to develop

detailed analyses of those categorized into lower levels. An interactive map of Canada can be used to determine where people with literacy ‘problems’ live. A profiling project was carried out in order to produce detailed breakdowns of the characteristics of people categorized into Levels 1 and 2 based on first language, gender, whether or not they are immigrants or First Nations, whether they have a disability, and education level. Each sub-group was then assigned a ‘value’ in the labour market. Finally, detailed analysis of the costs involved to move each group to the desired Level 3 proficiency were calculated. The profiling project was then used to persuade provincial policy-makers to shift their educational support away from those in the lowest levels in order to support those in levels closest to the desired Level 3 who were also deemed to have more ‘value’ in the labour market. Subsequent projects involving policy entrepreneurs are aimed at demonstrating how specific instructional interventions can be used to move people from mid and upper Level 2 to Level 3, and associated socio-economic impacts of increased literacy proficiency. Supporting the instructional interventions is an on-line instructional system, *TOWES Prime*, which is being constructed using the test development methods and item response framework to inform its pedagogical approach.

The mapping of various devices illustrated in Figure 1 and briefly described above will be described in greater detail in each of the empirical chapters. The graphic also appears at the beginning of each chapter with relevant aspects highlighted to help orient the reader in the analysis.

Thesis Overview: Development and Use of the Devices and their Impacts

The first of four empirical chapters, Chapter 4, examines the development of the test tasks used in the ILT and their regulating framework, item response theory. It examines

the model and accompanying scoring protocols that activate the model and are used to guide the development of test tasks. Then analysed, is a sample test task from the ILT, demonstrating some unique operational features of the test. Critiques of the test tasks and a technical aspect of the testing approach are included. Also examined is the development of spin-off tests for program and individual use that incorporate the testing methods. Accounts of their use in programs are then described.

Chapter 5 analyses the development of a set of level descriptions that describe the elements that make test tasks difficult. These level descriptions are the basis of the Essential Skills, a compendium of occupational standards. Also described is the competency-based curriculum development process, including an occupational task analysis, used to construct the Essential Skills. Included in the chapter are critiques of the Essential Skills. I then describe a series of instances in which various aspects of the Essential Skills (i.e. the skill list, the levels, and an occupational task analysis) are put to use in different adult education initiatives.

Chapter 6 examines how the ILT level descriptions, in combination with the Essential Skills, are used to construct the OALCF. It traces how instructional, assessment and accountability components derived from the ILT and Essential Skills are then used to manage and monitor adult literacy program outcomes, and make funding decisions. Most of the chapter describes how the texts play out in the provincial adult literacy system as they are put to use by curriculum developers and educators. It describes how the provincial system now has two distinct models of testing and curriculum in use in the adult literacy system, leading to a series of differently experienced impacts and inequities.

Chapter 7, the final empirical chapter, examines the development of the level implications scheme that was constructed to direct policy attention and impel action in order to address the literacy ‘problem’. An analysis reveals that the implications statements, developed as part of the ILT initiative, are based on assumptions and interpretations. The level implications, including the designation of Level 3 as a ‘suitable minimum’ are put to use by policy-makers. They have also been put to use by test developers to provide greater ‘meaning’ to a spin-off test. They are used most intensely by policy entrepreneurs to direct attention to the literacy ‘problem’, and to overhaul the aims and purposes of adult literacy education. I also analyse a comprehensive instructional and assessment system that is currently being produced as part of the effort to overhaul adult literacy education.

Chapter 2 provides some context and situates the two analytical concerns—accountability and the literacy testing initiative. It describes how accountability work in Canada and other jurisdictions is accomplished, and its impacts on learners and educators. It then provides an overview and critique of the testing initiative. The critiques focus on its positivist perspective and claims of objectivity; the initiative’s neo-liberal ideology; conflicts between its conceptualization and definition of literacy, and subsequent operationalization; and missed policy development opportunities. It then argues for the need to examine the intersection of large-scale testing and accountability.

Chapter 3 explores the theoretical and methodological basis of the study, institutional ethnography. It describes its ontology and analytical concepts used to guide the investigation. It highlights previously completed IE investigations that inform this study, including an analysis of a competency-based curriculum reform, and the development

and use of an occupational task analysis. The chapter provides details of the research process, data collection, data analysis and the study's limitations.

Finally, Chapter 8 concludes the thesis by summarizing the impacts of the use of the devices in the context of literacy learning initiatives, reforms, and programs. It reflects on the analytical process and discusses its usefulness beyond an academic study. It also suggests ways to use the analysis to advocate for changes. Research contributions are highlighted, and possible future empirical extensions are suggested.

2. Context of Program Accountability and the ILT Initiative

This chapter provides a broader context for the analysis of two intersecting concerns in the thesis: encroaching accountability processes and the transposition of textual devices from the ILT into adult education programs and projects. First, the chapter provides a compilation of program accountability concerns that have been voiced in Canada and other countries, namely the US, England and Australia. The accountability demands are variously described as administrative paperwork, policy processes, bureaucratic paperwork, achievement targets and regulatory mechanisms. Impacts include damaged relationships between teachers and their students, an erosion of teacher confidence, and growing gaps between policy decisions and teaching work. I then situate and begin to more adequately describe the constitution of such paperwork, policy processes and regulatory mechanisms as “managerial conditions” (Darville, 2002). More specifically, managerial conditions could include eligibility criteria, specified curricular outcomes, specific measures of learner ‘progress’ and skill ‘gains’, and achievement targets. Informing the development of various managerial mechanisms and related documentary processes are corporate management models and devices used to ensure operational ‘efficiency’ and ‘effectiveness’, including quality assurance, performance management, performance targets, and continuous improvement.

Secondly, the chapter describes, in brief, the international literacy testing initiative since its inception nearly 20 years ago until now. Critics have examined, questioned and denounced its positivist perspective and claims of objectivity; its neo-liberal ideology and overt focus on developing literacy for the exclusive use of economic growth, and as an impetus for international competitiveness; and for its conflicting conceptualization,

definition and operationalization of literacy within the context of the testing project. Finally, critics discuss how, for the most part, the aim to use the test to support educational policy development has resulted in a series of missed opportunities. Additional critical analyses of the operation of some of the test's modelling processes, and the operation of the test tasks are integrated into the empirical chapters in which they are fully described.

How Program Accountability Work is Accomplished and Its Impacts

Educators, researchers and advocates in Canada, the US, Australia and England have articulated their growing concerns with increasing accountability demands during the past 15 years. Canadian adult literacy educators have expressed their frustration and disillusionment with increasing accountability demands and administrative paperwork (cf. Crooks et al., 2008; Falcigno, 2002; Folinsbee, 2007; Horsman & Woodrow, 2007). "There is an increased sense that programming is shaped by decisions which ignore the realities of learners' lives. Demands for programs to collect data to justify program existence have multiplied" (Horsman & Woodrow, 2006, p. 11). The demands are incredibly challenging for small programs overseen by one person who is the teacher, administrator and program coordinator. Over 70% of literacy educators surveyed in Ontario said they did regular unpaid over-time work, "detracting from time spent with learners, decreasing employee satisfaction and increasing stress levels of workers in return (Falcigno, 2002, pp. 4-5).

Work from the US examined the impact of welfare reforms of the late 1990s and early 2000s on literacy education. "Teachers' practice was shaped by the ways in which the broad policy context traveled to their classrooms" (Belzer, 2003, p. iv). After the

implementation of the Workforce Investment Act in the US, the overall literacy system changed, often through changes in accountability mechanisms that in turn altered curriculum and assessments.

At the program level changes in response to the policies were made with regard to operations and structures, assessment and documentation, and access to resources. Instructionally, the policies tended to shift the curriculum away from traditional academics toward a much greater emphasis on pre-employment and job retention skills. Programs also placed greater emphasis on testing and documentation, as well as on goal setting. Rather than replacing classroom processes, these changes often added an extra burden to already over-taxed instructors (Belzer, 2003, p. iv).

Even in jurisdictions such as England and Australia, which have more sustained and comprehensive funding compared to Canada and the US, there are similar concerns over the increased accountability demands. The infusion of funding accompanying England's *Skills for Life* strategy, funded from 2001 until 2010, increased the amount of 'bureaucratic paperwork' for teachers, managers and administrators. "Bureaucracy was seen as eroding teaching and learning time, and encouraging staff turnover" (Hodgson, Edward, & Gregson, 2007, p. 218). Paperwork included lesson plans, assessments, training plans, and funding applications. "[S]ome staff resented the fact that much of this paperwork, while ostensibly created for learners, was in fact often undertaken to satisfy external scrutiny requirements in a climate where professionals are not trusted" (ibid.). One particular accountability mechanism, learner achievement targets, had the greatest effects on practice, as it was directly related to funding allocations. The targets, more than other mechanisms, had perverse effects on learners and learning. Lower level learners

simply didn't count when it came to allocating funding, forcing program coordinators to offset targets by recruiting "quick-fix" learners with little teaching time involved. Once targets could be met with these learners, programs were then able to accommodate learners at lower levels. Program coordinators were essentially forced to play games to accommodate the learners they wanted to work with most, and who realized the greatest reportable benefits. "Many tutors saw their work at lower levels as more demanding, more rewarding and more important because it could make a real difference to learners' lives" (p. 223).

In Australia, teachers "work the interstices"—the spaces in-between the demands of their accountability-driven work and work that is responsive to adult learners. These spaces have been demarcated for good teaching (Black, 2010).

[S]ome ABE teachers are finding it difficult to work as required within the regulatory mechanisms of the VET [Vocational Education and Training] audit culture, and they are finding various ways of teaching that operate on a continuum of resistance and accommodation to this culture (p. 22).

The accountability work is seen as an "add-on", something that must be done to comply with program auditors and officials, even though it has little to do with educational considerations.

Also in England, practitioners describe how new and increased paperwork requirements have alienated students and damaged relationships between practitioners and their students (Tusting, 2009). Teachers reported that their confidence in their professional abilities and expertise was being eroded. They felt as if they were "under surveillance"

and that the new requirements did not acknowledge their expertise, but instead, catered to the “lowest common denominator.”

Teachers consistently drew on a well defined discourse which defined ‘good’ teaching as teaching that is responsive to the learner, negotiating teaching in response to learners’ goals and characteristics, and flexible in the teaching moment. Resistance arose when aspects of the centralised strategy were perceived to constrain teachers’ ability to respond to learners in this way, being driven more by external demands and advance planning than by responsiveness to learners (p. 6).

Teachers and managers are frustrated with the growing gaps between policy decisions and practice. At the same time that they are required to obtain professional qualifications it seems that they have less and less say in the policies that impact their day-to-day practice. “[P]ractitioners have much to offer to policy-makers—not least in providing feedback on how all the various policy levers and drivers actually impact on the lives, life chances and everyday experiences of their learners...” (Hodgson, Edward, & Gregson, 2007, p. 227).

Informed literacy watchers seem to write increasingly about distortions, ruptures, contradictions, tugs-of-war, tensions, distractions, reversals, and competing values relating to literacy work. Policy and reporting frameworks (including assessment, performance monitoring, and quality assurance) are said to mislead, exclude, narrow, reduce and reorient the needs and intentions of teachers and learners. In the face of such dilemmas, many resilient and bureaucratically savvy literacy practitioners are said to be “gaming the numbers” and “circumventing the rules” to “survive.” Growing numbers of others are reported to be over-burdened, stressed, disillusioned, burned out, and leaving the field. This chorus of voices is remarkably similar across national,

international and intercontinental boundaries, fuelling a growing sense that literacy workers are becoming ‘enrolled as agents to a project’ (Hamilton, 2001, p. 191) that is increasingly not their own (Jackson, 2005a, para. 3).

Educators have little input into the way programs are affected by policies that are created elsewhere. However, those policies have tangible impacts on teaching and learning work and need to be investigated.

By shedding light on the way teaching is affected by factors which circumscribe teachers’ autonomy, this work foregrounds the crucial role social structures play in shaping teachers’ opinions, values, practices, and knowledge. More precisely, it suggests that social forces beyond teachers’ control also contribute to persistent and repetitive classroom practices (Nesbit, 2000, p. n.p.).

An obvious influence on teachers’ work, and what they can and cannot do, would be funding and related system design elements, such as the prevalence of part-time positions, continuous intake and the creation of multi-level classes. In addition, and often more challenging to recognize and analyze, are program management and accountability directives.

What is and can be done between teachers and learners is shaped not only by teachers’ knowledge and beliefs, but are also shaped within a large array of managerial conditions—funding rules, credentialing requirements, student eligibility, curriculum specifications, and so on (Darville, 2002, p. 60).

The accountability work is accomplished in part by using various documentary processes and mechanisms aimed at ‘effectiveness’ and ‘efficiency’. Public sector work, using

many of the same corporate texts and devices (e.g., performance management frameworks, quality assurance processes and customer satisfaction surveys) realize similar corporate ideologies aimed at ‘economic efficiency’. What works for private corporations to generate profit on the stock market is applied to public systems of healthcare, education and social welfare to minimize expenditures and ensure that as much wealth as possible stays out of the public sphere. Further, using the ‘efficiency’ logic, a myriad of mechanisms and measures are devised to provide evidence of ‘effectiveness’.

There is now a proliferation of devices for organizing and regulating literacy work, imposed from afar—forms of testing and accountability that usually narrow down the understanding of literacy to a set of skills (Darville, 2009b, p. 18).

On one hand, the devices used in Ontario’s system are similar to devices used in other systems (i.e. a competency-based curriculum framework, achievement targets and goals, and planning processes that incorporate sets of outcomes statements). The devices are fully explicated in the analysis. On the other hand, the Ontario system is also a unique system in that it has built a curriculum and accompanying assessment scheme using the ILT. It presents an opportunity to uncover an additional and novel development in the accountability process. The next section is an overview and critique of the ILT initiative.

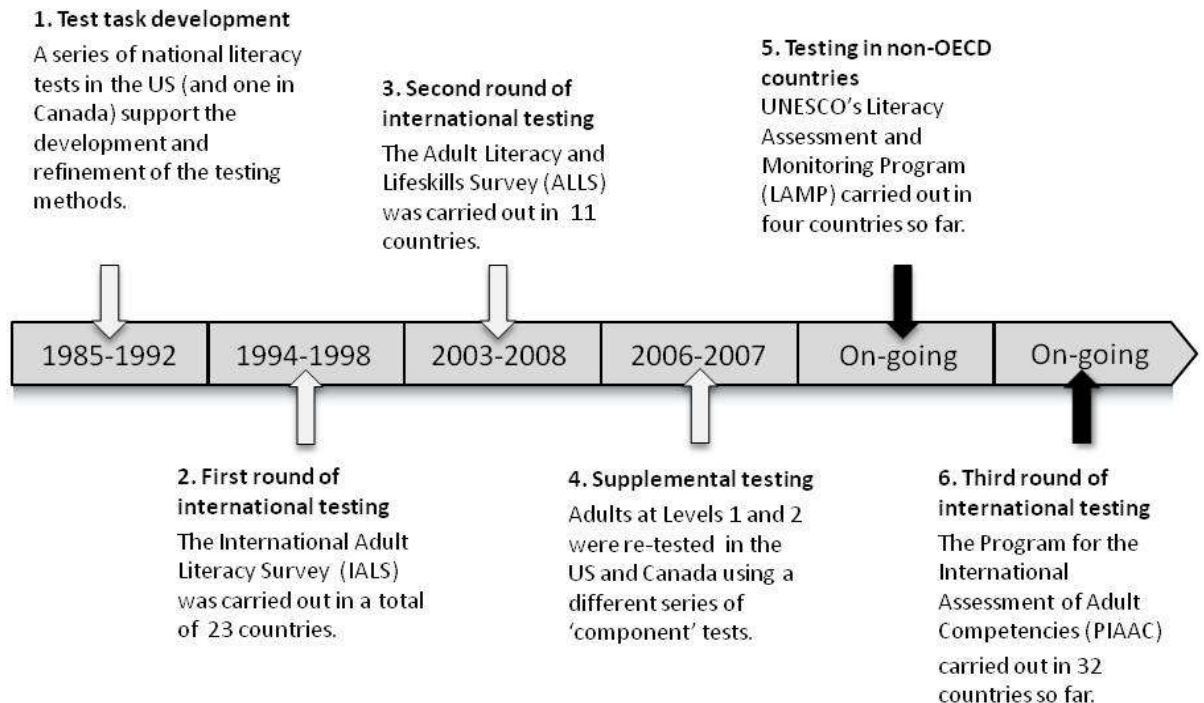
Overview of the International Literacy Testing Initiative

The figure below and accompanying description provide highlights of the components of the ILT that are discussed in the analysis. Following, is a series of critiques directed at

the testing project as a whole (critiques focused on specific aspects, such as the test tasks, are integrated into related empirical chapters).

International testing began in 1994 with 23 countries participating. The first round of testing was called the International Adult Literacy Survey (IALS). The international test was built on smaller national projects that took place in the US and Canada between 1985 and 1992 (refer to Appendix B for a comprehensive overview of the various national and international projects, including a listing of related reports). The work done in national projects established fundamental aspects of the international initiative, including complex scoring protocols, a five-level system to convey the meaning of the scores, and adaptation

Figure 2: Overview of the ILT Initiative



of test tasks for different languages and cultures. A second round of testing, the Adult Literacy and Life Skills Survey (ALLSS), involved only half the number of countries as the IALS. The ALLSS took place from 2003-2008. The Organization for Economic Cooperation and Development (OECD) in partnership with Statistics Canada oversaw the administration and subsequent reporting of the IALS and ALLSS initiatives. The third round of testing, the Program for the International Assessment of Adult Competencies (PIAAC), is currently underway. To date, 32 countries have participated in the initiative. Results for those 32 countries were released in October 2013. The second of three planned phases within PIAAC is currently underway with an additional nine countries participating, and calls are on-going for additional participation in the third phase. Unlike the first two rounds of testing, the OECD is overseeing the project on its own.

Supplementing the three rounds of international testing were two additional testing projects: 1) the Literacy Assessment and Monitoring Program (LAMP) aimed at non-OECD countries and organized by UNESCO; and 2) a supplemental test that was carried out only in the US and Canada. The supplemental test, using different names in both countries, re-tested adults categorized into Levels 1 and 2 during the ALLSS. The intent was to identify the ‘components’ of literacy needed to move adults at Levels 1 and 2 into Level 3. What ties the international projects and predecessor national projects together is their shared testing methodology and methodological expertise that was developed primarily by those working at Educational Testing Service (ETS). Their test developers and psychometricians have “developed or contributed to” each of the testing initiatives (Educational Testing Services, 2013).

The testing project extends and, at the same time, reformulates past efforts to measure literacy abilities, commonly referred to as ‘functional’ literacy. Previous tests were devised to determine whether or not individuals could use printed text and linguistic skills (i.e. decoding, reading comprehension, vocabulary, etc.) in order to ‘function’ in a text-rich society. The determinations of which particular skills could be used as indicators of ‘functioning’ and what ‘functioning’ actually meant have been subject to substantial debate and critiques (cf. Darville, 1995). While the ILT shares these concerns of ‘functioning’ in society (the term is even used in its definition of literacy), it has extended the purpose for testing in order to make comparisons between countries and jurisdictions. In addition, it has built a test using a distinct methodological framework, a framework focused on measuring cognitive processing rather than demonstrable reading and writing skills. Printed text becomes a ‘stimulus’ used to elicit a series of cognitive processing manoeuvres, all of which rely on linguistic skills and abilities, but they are not the object of measurement.

Positivist Perspective and Claims of Objectivity

After the IALS results were released, an over-arching epistemological and methodological disagreement between ILT developers, managers and advocates, who support the development of a unitary standard for literacy, and researchers theorizing and analysing literacy as social practice, played out in a discussion paper (cf. Centre for Literacy, 1997) and an academic journal (cf. Lankshear & O'Connor, 1999; Wagner & Venezky, 1999a, 1999b). The arguments, summarized by Druine and Wildermeersch (2000), were fundamentally a conflict of “underlying beliefs between quantitative and qualitative positions or rather between a positivist and an interpretive/constructivist

paradigm” (p.398). In the positivist paradigm a general, non-situational, objective and measurable reading ability exists, and there is an important relationship between literacy skills and economic productivity (Druine & Wildermeersch, 2000). However, within a social constructivist paradigm, literacy is a situational social practice, intrinsically part of culture, social dynamics and power relations. Its relation with economic productivity is complex, and not causal. In other words, it is a myth that literacy on its own can produce economic growth and change (Graff, 1997). Further,

Behind the statistics are a host of complex variables. Macro-structural factors such as manufacturing enterprises moving off-shore in the pursuit of cheap labour are more likely to relate to the ‘cause’ of unemployment than lack of literacy or numeracy skills (Black, 2002).

The arguments can be confusing at times. ILT developers, managers and advocates co-opt terms and ideas from social practice and sociocultural perspectives to support their conceptualization and definition of literacy (Druine & Wildemeersch, 2000). However, when operationalizing the concept of literacy, these ideas are subsumed by a model that decontextualizes literacy and cognitive skills, and separates literacy from its social and personal uses (Street, 1997).

The crucial terms of ‘new’ vocabularies are skimmed off and parts are woven back into the ‘old’ story, thereby removing much of their threat to the existing vocabulary and leaving the ‘old’ story essentially intact. (Druine & Wildemeersch, 2000, p. 397)

Further, ILT developers and managers hide (in plain sight) behind their claims of neutrality, universality and objectivity, refusing to acknowledge the broader consequences and impacts of their choices when constructing the test and writing about its results.

[...] through constructing their instrument the authors have inevitably constructed reality. They have defined literacy and numeracy skills in a particular way, thereby claiming that their construction is universal [...] the way in which literacy and numeracy skills are constructed is inevitably the result of a power game that sets up clear hierarchical distinctions among multiple literacy and numeracy practices (p. 402).

What allows ILT developers and managers to do this is the positivist belief that they have accurately observed, represented and measured a trait that was simply waiting to be unearthed once sophisticated tools and instruments became available. What they refuse to acknowledge is that their sophisticated tools and technical abilities gave life to the trait in the first place. They made the trait called information-processing literacy exist, and it only exists in the presence of the models, processes and constructs used. (Of course people may have to search for bits of printed text when they encounter documents in their day-to-day lives. However, in the testing situation this activity is carefully manipulated and controlled.) By refusing to acknowledge that the literacy constructed for large-scale testing is merely that, a construct, test developers absolve themselves of ethical responsibility and engaging in debates and discussions.

[...] it is not the IALS researchers who have privileged it [information-processing], it is society [...]. It is not for the IALS research team to determine whether it is fair that this one kind of literacy is so valued by society (Jones, 1997, p. 23).

Neo-Liberal Ideology: Literacy for a Knowledge Society and Competitiveness

The aims of the ILT initiative both reflect and, as will be demonstrated throughout this thesis, activate what can be broadly called neo-liberal interests. Within a neo-liberal mindset, literacy is a means for national economies to be internationally competitive

within an ever-changing ‘knowledge society’. Within neo-liberal discourse “the primacy of the market for organising all human activity is taken for granted” (Roberts, 2000, p. 439), as exemplified below:

Unlike their predecessors, adults today need a higher level of literacy to function well, because society has become more complex and low-skill jobs are disappearing. Inadequate levels of literacy in a broad section of the population may therefore have serious implications, even threatening a nation’s economic strength and social cohesion (Kirsch & Murray, 1995, p. 13).

While literacy is the means, information is the commodity. The shift towards discourses of information marks a reconceptualization of knowledge, as the terms information and knowledge are conflated (Roberts, 2000). Accompanying the conflation of information and knowledge in neo-liberal discourse is a complementary obsession with ‘skills’, and ensuring the development of ‘skills’ to handle information demands.

The rhetoric about skills, information and the knowledge society is not (merely, if at all) the manifestation of a desire to improve individual lives, but also a reflection of the changing demands of capital at the end of the twentieth century (McChesney, 1996) (Roberts, 2000, p. 440).

This rhetoric is clearly laid out in ILT reports:

In today’s world, however, major shifts that influence the competitiveness of nations can occur quickly. . . . Hence, workers need to continuously acquire new skills and qualifications. . . . Poorly trained adults who cannot adapt to new conditions and labour market demands face increased risks of social alienation and economic exclusion (OECD & Statistics Canada, 1995, 21–22).

The underpinning logic of the aims of the testing initiative are apparent, whether called neo-liberal or post-Fordist, “people need to acquire the skills necessary to ‘keep up’ with rules, practices, procedures, and attitudes decided for them by someone else” (Roberts, 2000, p. 446). ‘Keeping up’ leaves little room for questioning the impacts of following the new rules and procedures or critiquing and resisting the structures.

...IALS authors inevitably have a particular understanding of how society is currently transforming. They implicitly and sometimes explicitly seem to share the neo-Darwinist assumptions about the ‘nature’ of these transformations. All members who are not able to adjust to the exigencies of the ‘globalised economy’ or ‘the knowledge society’ will in their view inevitably be excluded. This development is not questioned. The members of this society seem to have no choice but to adapt (Druine & Wildemeersch, 2000, p. 398-399).

Within the ILT, there is no critique of ‘participation in the knowledge society’, its meanings and impacts on the lives of workers caught up in increasing demands to be flexible, adaptable and skilled in the manipulation of information. Information literacy learning however,

...often implies nothing more than the capacity to manipulate and identify quantities of information...This technocratic reductionism renders the ethical, political, cultural and historical dimensions of literate activity invisible. Taken to their logical limit, such technocratic trends make it difficult to draw a line between the performance of machines and the activities of human beings (Roberts, 2000, p.448).

Conflicting Conceptualization, Definition and Operationalization of Literacy

The use of three domains (i.e. prose, document, quantitative) was intended to capture a more complex and multi-dimensional portrayal of literacy, compared to previous

functional literacy tests. However, the three domains rely on the same underpinning model of information-processing with some extensions.

...the researchers' actual measurements of literacy may still be just as rigid and arbitrary an operationalization as 'absolute' literacy. All that is really happening is that the threshold for literacy is being raised, the domains extended, and several levels recognized, to replace a single fixed cut-off point (Payne, 2006, p. 228).

Further, the decision to develop three domains is influenced more by methodological considerations than by the way people actually engage with documents. Since most reporting and discussion is focused on the prose dimension, subtle differences between the domains are lost (St. Clair, 2012).

The ILT literacy definition "using printed and written information to function in society, to achieve one's goals and to develop one's knowledge and potential" (Kirsch and Jungeblut 1986, p. 3) seems to be grounded in actual social conditions, describing what someone can or can't do with their literacy abilities (Payne, 2006). Subsequently, there is a "logical inconsistency between the cultural relativism of the generic definition, and the specific measurements used in the operationalization process" (Payne, 2006, p. 227). In other words, the definition suggests social meaning and use of literacy, which is contrary to the highly technical, pre-determined and manipulated literacy constructed for testing purposes. The definition also obscures social determinants of low/high literacy (Payne, 2006) and access to the practices that support the development of literacy. Also, the definition disregards the role of adults in producing information. Within the tests, adults are merely passive users and consumers of texts (St. Clair, 2012). Adult learning is

reduced to “enhancing labour-market competencies” (Druine & Wildemeersch, 2000, p. 391), disregarding the current role of literacy in people’s lives and their literacy practices.

Missed Policy Development Opportunities

The stated aims of the ILT initiative are to “offer policy makers a useful tool for policy analysis” and to help “craft” educational policies and programs “that can contribute to economic and social progress” (OECD & Statistics Canada, 2000. p. iii). While the extensive data could be used to inform ‘macro’ policy analyses, efforts in Canada and other countries have not been comprehensive or on-going. Many countries have disregarded the data. As a tool to craft education policy, the ILT has seen its aims met with some limited success. However, as this analysis will demonstrate, crafting education policy based on the ILT can also lead to perverse pedagogies and detrimental inequities.

Two countries—New Zealand and England—used the ILT results, specifically the IALS, to mobilize comprehensive and sweeping education changes for adults. After the release of the initial IALS results, the New Zealand government turned its attention to adult education with a particular focus on language and literacy development for new immigrants and indigenous peoples. Literacy moved from the periphery of education policy to the mainstream and was comprehensively supported with additional funding for teacher training and program development (Sticht, 2008). As a result, in New Zealand, proportions of adults in Levels 1 and 2 declined, and more adults were categorized into higher levels during the next round of testing (i.e. ALLSS survey). England also mobilized a comprehensive multi-year response, *Skills for Life*, spending approximately £5 billion on program development, national curricula, teacher training and certification, and research. Their motivation, according to one analyst, was more about embarrassment

over the results than concern with literacy development for broader individual and social purposes (Brooks, 2011). England did not participate in the ALLSS, and devised its own measures for *Skills for Life* so it's not possible to measure the impacts of *Skills for Life* using the IALS/ALLSS framework, although attempts at alignment were made (Brooks, 2011). The *Skills for Life* initiative came to an end in 2010, after its planned nine year duration, and was not renewed.

Unlike New Zealand and England, Canada did not mobilize such a comprehensive national response, due to the way that education, including adult education, is primarily a provincial responsibility⁴. The results did motivate some increased support until 2005 when the newly elected conservative government cut and reoriented key programs that supported adult education such as the National Literacy Secretariat, the Canadian Council on Learning and the policy think tank Centre for Policy and Research Network (Rubenson & Walker, 2011). The Office of Literacy and Essential Skills (OLES), created in 2005 to replace the National Literacy Secretariat, has a restricted interest in literacy as a contributor to labour market development, and has gradually withdrawn its support of more comprehensive initiatives for families, communities and social development (Hayes, 2009). Initially, with funding from the National Literacy Secretariat (1987-2005), secondary analyses of the IALS data were conducted. Using only the Canadian data, a

4 However, a national adult language education initiative has been in place for two decades. The national Language Instruction for Newcomers to Canada (LINC) program has the same key components as other national literacy and language development efforts: a national curricula and set of standards (the Canadian Language Benchmarks), teacher certification, and program development support.

series of reports examined a variety of factors in relation to employment, earnings, education, language proficiency and immigration. Once the NLS was disbanded, an organized approach to secondary analysis has been carried out in a piecemeal way. One of the ways that the ILT has been used in Canada is to garner support for the development of a national literacy agenda (Rubenson & Walker, 2011). To date though, the federal government continues to offer short-term project funding targeted to employment and the labour market, and has not been able to work with provinces on a national strategy for adult literacy.

Further, there is a glaring limitation of the extensive data that is collected in the ILT initiatives. Focusing only on the individual, they neglect to account for the way that literacy is or is not supported by communities and socio-economic factors in various regions (Bernardo, 2000). As a result, analyses and policy directions are limited to the development of either macro national policies or micro level individual instruction rather than on making communities more literate by developing support structures (Bernardo, 2000). Both macro and micro analysis also miss the point when “education does not create employment” (Druine & Wildermeersch, 2000, p. 394).

Looking at the data that is collected, not enough attention is paid to gender, age, ethnicity and structural changes in the labour market (Payne, 2000). There are scoring differences between males and females, and a possible gendered nature of the tests could be investigated. There is also a lack of good data on ethnic differences and differences between particular groups that could be informative. The data is solely focused on adults in the labour market and does not include retired persons. Overall, there is little attention paid to the influence of age, education and work history. Although mentioned in the

reports their “sociological significance is not recognized” (p. 233). Reports discuss how scores relate to employment history and type of employment, but do not make a connection with structural changes in the labour market, maintaining a myopic and deficit entrenching focus on the individual (Payne, 2006). Finally, writes Payne, no sociological attention is given to the construction of the ‘literacy problem’ in the reports. There is only a limited discussion of the sociological meanings of literacy in the IALS (using concepts and meanings co-opted from sociocultural discussions) and the wider impacts of the surveys.

What does all this mean for policy-makers who view the ILT as a “robust, comparative measure” (St. Clair, 2012, p. 764)? St. Clair urges policy makers to exercise caution and restraint when using the data in relation to country comparisons and the socio-economic implications of the levels. Their uses of the data should be limited to what the test was designed to do: provide some insights into population level variables (not individual abilities) using a particular model of literacy and cognition. Other researchers have set more explicit limits around the meanings and uses of the results:

[T]he IALS test offers yet another proxy measure for literacy, and we suggest that what the test is really measuring is artificially constructed test literacy, sampling a transnational culture and tapping people’s participation in the global economy. This is a literacy but it is not literacy (Hamilton & Barton, 2000, p. 385).

Policy-makers have a responsibility when making decisions about the way they use the data produced by the ILT initiative, including the most recent PIAAC. They also have to look beyond the reports in order to place them in context and recognize their limitations. Information in the reports

[o]bscures the fact that the definitions of what kinds of competencies are important in a particular society are not the result of natural processes but of conflicting struggles that privilege particular competencies and erode the value of others at certain moments in history. In a democratic society, the choice of particular competencies should therefore be the subject of continuous public debate on various levels, rather than the result of powerful labour-market forces (Druine & Wildermeersch, 2000, p.400).

Conclusion: The Need to Examine the Intersection of Large-Scale Testing and Accountability

The critiques of the ILT initiative contribute to a body of critical analysis of the impacts of large-scale testing and misuses of testing data in education that address the following: the reductive impacts of numbers and data on such things as conceptualizations and people's own understandings and uses of literacy; the understanding that test scores are always and only products of methodological and theoretical choices; the recognition that test results are never apolitical and neutral; the insight that that testing is a technology of social control; and the observation that that test scores are too often misused, for social sorting purposes (Gorur, 2013).

More recent approaches to the critical analysis of large-scale testing projects using ethnographic approaches and textual analysis deepen and broaden critique. Such approaches include science and technology studies and actor network theory, semiotics and institutional ethnography (Hamilton, 2013). They provide insights into the operation of the assessment process, not just through an examination of results and impacts, but also an analysis of how and why things are put together. In other words, they provide a way to look “inside the assessment machine” (Maddox, 2013). IE provides analytical

tools to investigate the textually coordinated procedures and processes that are used in this work, which can be traced in published documents such as peer-reviewed articles, technical reports and even on-line presentations. More importantly, and at the heart of IE, is an investigation into the impacts of such textual processes on the lives of educators and learners. The transposition of the ILT into accountability and instruction has not been examined. However, such a course was astutely predicted (cf. Darville, 1995; Hamilton, 2001). Further, analyses to date have not examined the impacts of the ILT derived pedagogies and policy on programs, educators and adult learners.

3. Using Institutional Ethnography to Investigate the Transposition of the ILT into Policy, Pedagogy and Practice

Institutional ethnography is a discovery of how the institutionally organized worlds that we participate in are put together (Smith, 1987). An institution is not contained by bricks and mortar, nor defined by its bureaucratic system design; it is rather a “complex of relations” between people that are connected by the coordinating influence of textual concepts and practices. The task of an inquiry, which begins in and with people’s experience, is to explore and analyze the complex of institutional relations structuring and coordinating people’s activities in their particular setting (P. Grahame & K. Grahame, 2001). IE provides the methodological stance and tools to direct the researcher’s attention in order to reveal how this organization comes together and operates by tracing and describing the coordinating influence of texts. IE is put to use in order to carefully explicate how people are positioned in a coordinated organization of institutional relations; and how an institutional organization develops technologies of management that rely on but may not consider actual work practices. It proceeds with the hope of making people’s “working experience accountable to themselves...rather than to the ruling apparatus of which institutions are a part” (Smith, 1987, p. 178).

An Ontology of Ruling Relations

The relation of local courses of action to the institutional function is examined as *ruling relations*. The ontological concept of ruling relations is used to indicate how textually derived realities are used to organize people’s everyday lives, an organization that is embedded in and yet separate from the actual experiential and lived conditions of their lives. Ruling relations are not “necessarily visible to any individual involved, are not

intentional, or managed” as such (Griffith & Smith, 2005, p. 124). We are all part of institutional ruling relations, but until connections are explicated between people’s immediate and local experiences, and the texts that are used to coordinate day-to-day activity in objectified ways, they are difficult, if not impossible to recognize and fully understand. In addition to revealing the connections, an IE project may uncover potential opportunities to make space for people’s actualities in the standardization processes. In this way, institutional ethnography is also a liberatory project (McCoy, 2008).

An institutional ethnographer does not draw on discipline-based theory to make the social knowable, nor does the researcher theorize or categorize the social or people’s everyday doings. To start with a theoretical construct prevents the researcher from examining that construct, along with professional discourse and administrative categories, as part of the “conceptual and coordinative practices of the setting” (McCoy, 2008, p. 704). Within IE, concepts and categories are used to explicate ruling relations. They are not used to explain, predict or model those relations. Further, IE concepts are not used to support a single theoretical interpretation of social activity, as the relations “diverge so deeply that they cannot be subsumed under a single theoretical model” (Smith, 2009, p. 76). Further yet, IE aims to map various connections and texts that constitute ruling relations, but a map cannot be held constant, as relations change.

The Ruling Relations of Literacy for a 'Knowledge Society'

Literacy has been used throughout history “to manage populations for the benefit of powerful interests” (Jackson & Slade, 2008, p. 27). Powerful interests have included the church, industrialization, moral education and nation-building. Throughout the 20th century literacy, realized through higher levels of education attainment, has become “one

of the great engines of profit and competitive advantage” (Brandt, 2009, p.24). The concern with literacy and its generally unquestioned “competitive advantage” is not new but has become more pronounced as new modes of generating profit within a ‘knowledge economy’ are sought. Within a ‘knowledge economy’ literacy becomes a valued economic resource, and an assumed indicator of workers’ abilities to be ‘productive’ and contribute to corporate profit-making. Valued in the economy, literacy and people’s literacy abilities are caught up in the “contemporary reorganization of capitalist enterprise” (Smith & Dobson, 2011, p. 82), commonly referred to as neoliberalism. The reorganization is being done to ensure that labour, and the work at the front desk or on the production floor, is aligned with a corporation’s share prices and market performance. Individual skills, including an individual’s literacy skills, are thus reduced to a “human resource” (D. Smith & G. Smith, 1992) that can then be “appropriated” as part of the reorganization (Darville, 1999). This investigation does not provide a comprehensive unpacking of the role of literacy in a ‘knowledge economy’, including the influential work of the OECD in relation to education, including adult education (cf. Rubenson, 2008). The focus is on the way that a technology of the OECD, the ILT initiative, is being used to ensure individual productivity in a ‘knowledge economy’ and the development of what the ILT project considers to be a ‘knowledge society’.

Literacy for a ‘knowledge society’ is an ideological discourse that operates at a “metalevel” (D. Smith, 2005, p. 224) and controls the institutional discourse of adult literacy education, appearing in policy, curriculum and assessment documents. Within IE, discourse is conceptualized, not merely as ideological, but as an organizer of activity. A literacy education discourse for the ‘knowledge society worker’ “provide[s] categories

and concepts” that articulate “local courses of action to the institutional function” (Smith, 2005, p. 225).

As an indicator of people’s abilities in the ‘knowledge society’ a newly conceptualized literacy-for-competitiveness becomes the means to develop and use “human capacities within the social relations of capital” (Darville, 1999, p. 273). Literacy skill is conceived within a global “competitiveness project” (ibid.).⁵ To be competitive, a worker is “able to shift between tasks, and to adopt new technologies and forms of work organization, in order to increase productivity” (p. 275), involving work and work processes that are increasingly textual.

The interest of the “competitiveness” project is on managing and monitoring the literacy resource to ensure its continued, and more importantly, expanded and intensified development. The ILT is the “tool” used to support the project, as it

...assesses, labels, ranks, and organizes whole populations according to their value as a resource for production, and thus for capital accumulation on a transnational scale. Having IALS data to certify the ‘employability’ of the population is increasingly like having ISO certification; it means that the nation is ‘open for business’ in the global economy (Jackson & Slade, 2008, p. 37).

⁵ A description of the ruling relations of literacy for a ‘knowledge society’ also supports a partial unpacking of the notion of ‘human capital’, but is far from being a full analysis, which is beyond the scope of my project.

ILT results can serve as a warning system to alert politicians and policy-makers about the potential deficiencies of the resource, and compel them to address the concern.

Population testing is used as a policy motivator to incite responses that address the overarching policy interest—ensuring the development of workers for a ‘knowledge society’. Governments respond with policy initiatives that are formulated using test results and socio-economic implications. Within the ILT initiative “the concept of literacy has been redesigned or reinvented” (ibid.). Subsequently, a literacy for the ‘knowledge society’ “is constructed from the outset as an object of economic and other managerial processes” (Darville, 1999, p. 278). More specifically, literacy for a ‘knowledge society’ is realized as an “an adult literacy regime, an ensemble of inter-twined governing processes that aim both to promote literacy and to regulate its development, within the overall governing of society” (Darville, 2014).

Within the “inter-twined governing processes” are specific texts and textual devices that are “organizers” (Smith, 1993), such as curriculum frameworks, sets of level descriptions, and test tasks “that transmit ‘organization’ invented in one site of ruling to multiple sites” (p. 93). For example, test tasks and their spin-offs developed within the context of large-scale testing, assembled at ETS and put to use by the OECD, make their way into local programs, carrying with them a novel operationalization of literacy for the management and development of individual abilities, and ideological intentions to ensure the development of a specific kind of literacy for a ‘knowledge society’. In other words, literacy-for-competitiveness ‘organizers’ are not only used to coordinate macro-level policy responses, they also coordinate micro-level instruction. They are assembled into various curricular, managerial and policy devices, organizing funding parameters,

coordinating aims and purposes of literacy projects, organizing learning outcomes, and changing what goes on in programs between adult educators and learners.

Methodological Concepts Used in the Analysis

IE provides a handful methodological concepts that are used to orient the researcher's gaze and attention towards particular textually-mediated moments that illustrate how the social happens (McCoy, 2008, p. 704). And, in the context of this analysis, how ILT derived devices constitute a "literacy regime" and activate "inter-twined governing processes". The methodological concepts are not "heuristic devices" (De Vault, 2008) but are "analytic devices" (Smith, 1997). They carry the ontological perspective of IE and are used in active ways—to trace, to connect, to explicate—the institutional arrangement.

Experience and Work

People's experience of the social, and the institutional arrangement of concern (that is not yet recognizable), is the starting point in an IE project. This present project is grounded in my own experiences, and more specifically, my concerns, questions and frustrations working with a series of learning outcomes initiatives and changes as an adult literacy educator, program coordinator and curriculum developer. One's experience is "a place to begin, not a topic, nor a subject-matter, nor an object" (Smith, 1993, p. 183). Experience is not simply about recounting what happened; and is not a pure representation of some original or *a priori* understanding. "[S]peaking and writing of experience is always in language or discourse..." (Smith, 2005, p. 141). In other words, the experience is not only a 'lived' experience, but is embedded in a complex web of discourse and relations.

To orient the researcher within experience, a generous notion of work (Smith, 1987) is used in an inquiry. Derived from feminist thinking, explains Smith, work becomes any

sort of activity that involves sustained attention. An individual's work knowledge is always located in sequences of action that involve texts. Their work knowledge and doings are "hooked into" other doings and other texts. Therefore, an IE researcher talks to individuals to learn, not only about how they do their work, but also to learn how this work is coordinated beyond them—how their work may be similar to others in different locations, at different times.

Texts, Discourse and Textual Coordination

Within IE, a text is not analysed for its inherent properties, for how it may 'convey meaning'. Texts are examined for the way they are put to use to get something done—the way the text is taken up and what comes next (Smith, 1997). Similar to a "generous notion of work", a text is also understood in a generous way, within the parameters of materiality. A text must be replicable in its various forms.

The term text is understood inclusively to locate any material thing carrying words, numbers or images that can be and is replicated so that the consciousness of anyone looking, reading, hearing, is coordinated (though not determined) by the same words, numbers, images, or sounds as any other (Smith, 2007, p. 10).

It is these textual standardizations that become "recognizable and accountable" to the institution (Smith, 2005, p. 186). The categories, generalities and standards are at the least "indifferent to actuality and particularities" (ibid.).

Texts are the replicable representations of discourse, and discourse "is understood as text-coordinated relations among actual people" (Smith, 2008). This conceptualization of discourse is different from a critical discourse analysis, which would analyse discourse in

order to connect to ideology in an effort to raise consciousness. Tracing the way discourse constitutes social practices, and produces knowledge (Smith, 2005) is also different from the manner in which Foucault discusses discourse and “regimes of truth”, From an IE perspective, discourse comes into being only through its activation. It is only through people’s active use of a text that its discourse becomes meaningful and coordinates consciousness. “The texts that constitute and regulate (D.E. Smith, 2001) establish agency, that is, textually specified capacities to control and mobilize the work of others” (Smith, 2005, p. 183). This capacity or power is not contained by a particular entity or organization, or even an individual. Texts are the primary medium, but not the substance of power (Smith, 1987). IE’s distinctive conceptualization of text, that is, the coordinating properties of text has been informed by sociological, literary and psychological theorists (Smith, 2005).

Smith describes a text-reader conversation to integrate these ideas. Reading a text involves both an activation of its meaning and a response. Activation involves inserting meaning into a local setting or work process. Texts become coordinators of activity and organizers of experience. When activating and responding to texts we are both subject and agent. We respond (and at the same time, activate) by providing requested information and using designated terms and meanings or we may even work with the text to resist, repudiate, work around, game the numbers, etc.

The challenge in IE is to recognize both moments in day-to-day work, the moments that “text-reader conversations are embedded in and organize local settings of work” (2005, p. 161). This can be done with deft interviewing or by using autoethnography (e.g., de Montigny, 1995). Making such moments visible can be a challenge. We work within a

complex of inter-related textual systems and categories that are ubiquitous in our society (Bowker & Star, 2000). As we go about our day-to-day activity, a certain “inertia” sets in (Smith, 2005, p. 102), cloaking such moments until they are revealed to us or by our own discoveries and disjunctures. Such disjunctures indicate that something is going on, that our work is being coordinated in ways that don’t fit our experiences. These moments help us to recognize that these things in our experiences “don’t just happen” (Jackson, 1995). Supporting analytical concepts are put to use in the analysis, namely regulatory texts, intertextual devices and interrogatory devices.

Regulatory Frames. Regulatory frames are “discursive procedures that organize how something is to be interpreted” (Smith, 2005, p. 227). The frames provide “instructions for interpreting the texts” and “orient the production of a text” (ibid.). In the analysis, both item response theory and competency-based curriculum are analysed as regulatory frames. They both provide extensive instructions for production and interpretation. Item response theory is used to guide the production of literacy test tasks, and is referred to as the “analytical framework” for the construction of test tasks. To be deemed successful, the test tasks must operate in the ways directed by item response theory. Competency-based curriculum development has used the same set of regulating principles to guide the development of curriculum frameworks for nearly a century. Similar to the test tasks, developed using item response theory, the curriculum framework, and more specifically sets of learning objectives must conform to the ‘instructions’ associated with competency-based curriculum development.

Intertextual Devices. An intertextual device is a hybrid of organizing texts that operate in interdependent and hierarchical ways (Smith, 2005). In the analysis, an intertextual

device is the incorporation of the ILT level descriptions and general test task development methods into competency-based curriculum frameworks. The curriculum framework is the recognizable device and directs the use of ILT level descriptions and general test task development, both of which are modified within the curriculum framework design. Subsequently, when comparing two competency-based curriculum frameworks that incorporate the ILT devices (i.e. the OALCF and Essential Skills) accompanying sets of learning objectives and assessments have some differences. In addition though, their similarities can be made apparent by uncovering their shared regulating properties.

Interrogatory Devices. Interviewing, interrogation and questioning, explains Smith, are devices used to fit people's experiences into an institutional discourse. For example, one describes how social service workers, in charge of child welfare 'cases', create accounts of events, often harrowing and disturbing, that "smooth out rough spots" and "troublesome edges" (de Montigny, 1995, p. 15). What remains "are relatively uniform accounts, which to the degree that they represent a smoothly constructed object can be sorted out and fit back together through various forms of rehabilitation, teaching, healing or correction" (ibid.). The intent of 'interrogation' is to use questioning, likely accompanied by a checklist or even specified questions, to reformulate the complexities and particularities of experience into a format that conforms to institutional concerns processes. In this analysis, a checklist of Essential Skills domains is used during an educational counselling session to construct an account of worker expertise that is reformulated and force-fit into the categories. Related to interrogatory devices are, what I call, curricular devices, such as rubrics and self-assessments that are used to reformulate the learning and literacy experiences and endeavours of students into institutional

categories (i.e. learning outcomes and levels) for the purposes of managing and monitoring literacy program performance.

Completed IE Analyses that Inform this Study

Completed IE analyses, related to this study, were used in two ways: to better understand the approach to analysis in general, and to learn how other researchers have put analytical concepts to use; and to incorporate completed analyses into my own work, in order to build on related discoveries. Highlighting other IE studies at this stage in the thesis also provides readers, who may be unfamiliar with IE, an opportunity to see how concepts are put to use, and to read completed accounts of textual coordination within the context of adult education and training. Various curricular devices, namely learning plans, a vocational qualifications process, and an occupational task analysis, have been examined in previous IE analyses. Although the jurisdictions in which they are developed and used (i.e. England, Australia and Canada) and their learning contexts (i.e. adult literacy education, vocational skills development and workplace training) differ, their overall operation—a parsing and reassembly of expertise and knowledge for managerial purposes—are similar.

The coordinating properties of learning plans. One of the main curricular devices mandated for use in Ontario adult literacy programs until the OALCF was an individualized learning plan (also called a training plan). The individualized learning plan or ILP is also used in nearly identical ways in England, illustrating the ubiquity of such devices.

Directions, questions, formats and templates used to develop the learning plans direct the following processes:

- Literacy practices are parsed into subjects or domains (i.e. grammar, spelling, vocabulary, reading or document use, etc.);
- The various reasons and purposes for attending a program are formulated into a SMART⁶ learning goal;
- Students are coached to express their learning goals in terms that will be recognized by program auditors; in other words, the tutors “put words into their mouths” (Hamilton, 2009);
- Learning topics are selected and filtered out to fit into the training plan categories;
- Levels of learning are assigned to students, and in turn, students are often identified as a levelled learner (e.g., she’s a Level 2 in Math and Level 3 in Reading);
- Time and pace for learning are organized using weekly and term-based milestones or goals.

The learning plan actively coordinates the learning that occurs in programs for administration and program management, and not in response to the learning purposes and endeavours of adults. As a result, there is an alignment of learner and educator identities with “auditable outcomes” (Hamilton, 2009). The textually coordinating properties of learning plans provide organizing concepts and directions so that learning and the individual’s learning purposes are reformulated to become manageable and measurable, rather than pedagogically useful and personally relevant. Adult learners are disengaged from the process and don’t really understand the purpose or intent of the

6 A SMART goal is one that is Specific, Measurable, Attainable, Relevant and Time-bound (other aligned terms are commonly substituted). The SMART goal process is a coordinating text that came out of project management in the early 1980s (SMART criteria, n.d.)

learning plans. This may happen because educators shield them from the required details, and also because there is little time to involve them in the documentation process (ibid.).

Educators react to the demands of the learning plans in various ways. Some become enthusiastic proponents, others are more cynical, distrustful and resistant—simply doing what is necessary but dismissing the process as a bureaucratic imposition. Yet others look for the possibilities within the process (e.g., the chance to incorporate regular one-on-one discussions about learning) while accepting that there are other unsatisfactory aspects.

Overall though, educators devote

a tremendous amount of creative energy into making the paperwork fit to their organisational circumstances, their colleagues and their students, and in this way become incorporated in detailed ways into the system goals (p. 237).

Educators become invested in the materials and learning plans that they produce. They attempt to streamline the process and make it less onerous. They discuss the learning plans with each other, borrowing templates and ideas. New educators are trained in the use of the learning plan and sometimes participate in formal training courses. New materials are adapted in order to fit better with the categories used in the learning plan. Educators respond to requests from program inspectors to make adjustments to the documentation to ensure they align with system requirements (e.g., break down goals into smaller elements, or add detailed comments from students). Hamilton demonstrates “how government use of performance indicators and high-stakes targets in public service reforms may have perverse and unpredicted outcomes.” It also shows “how texts themselves are central to such projects” (p.239).

Determining competence using a vocational qualifications device. In order to receive a vocational sector-based qualification, workers in Australia go through a certification process, which is a system of assessments tied to competency standards (Grace, 2006). The competency standards become the only legitimate way of recognizing individual skills and knowledge, and reorganize how workplace practices are thought about and understood. Worker expertise must be fit into the established standards. Practice is then deemed to be competent by practitioners who interpret the competency standard, never by the employee or participant. Practitioners participate in validation sessions with each other, in which the practitioner's decisions are not judged against actual work practices or the interpretation of the employee but against the decision-making of other practitioners. These judgments are then subject to further scrutiny in a formal compliance audit. Quality is judged according to compliance with an auditor's evaluation. The evaluation process does not consider the participant's judgment, and the auditor has the authority to disregard a practitioner's judgment.

Knowing that their texts will be audited, practitioners avoid using language that is accessible to the participants, and use the more formal and abstract language demanded by the competency standards. The "complex and excluding language" undermines the confidence of both practitioners and VET participants, and acts as a barrier for people who wanted a VET qualification (Grace, 2006). The language depends on the use of passive voice, and terminology that is unfamiliar to the adults participating in training. The language further marginalizes adult students, reminding them of past school failure and making them feel inadequate.

Such language puts a distance between the reader and the text, with the result that even employees who are regarded as proficient workers are unable to recognize the everyday skills and knowledge they use on the job as being the same skills and knowledge demanded in the competency standards that relate to that job (p. 6).

Practitioners who want to ensure that the language connects with the participants have to do extra work in a double translation process—from standard to practice, in order to connect with the participants, and then, from practice back to standard, in order to connect with the standards.

Managing workers' skills using an occupational task analysis. An occupational task analysis process used in the workplace becomes “a documentary device for translating industry’s needs for skilled labour into curriculum objectives” using a device called DACUM (Designing a Curriculum) (D. Smith & G. Smith, 1992, p. 171). The DACUM process is part of a broader shift that sees the “labour force as a resource to be managed” (p. 186) in order to compete globally. Within DACUM, labour processes are analyzed as specific tasks. The tasks can then be translated into precise objectives for training, and then used to design learning and assessment materials. The resulting curricula “operates between the sites of industry and training, making it possible for curricula to be determined by the actual needs of industry” (p. 174). The analysis of job processes acts more as a skills inventory for the company or industry than as the documentation of individual skills and abilities. The skills are attached to the job role and not the individual who has acquired and demonstrated them. They are fit into task categories predetermined to support the skill analysis process. In this way, the skills are the property of the labour market and not the individual. These tasks are then used to create a curriculum.

...defining the individual in terms of itemized skills rather than an occupation removes the component of entitlement built into the training-job relation governed by the category of occupation. Workers could be required to take jobs at any level of their skills inventory, rather than pegging their job search to a specific occupation. The skills produced in this way (and by 'production' we mean the whole process of analysis, performance training, certification, etc.) become properties of a stock of labour attached to an industry, in effect a vertical integration of industry and training (p. 194).

The three analyses just reported all describe the textual coordination of expertise, knowledge and learning purposes using curricular devices (i.e. learning plans, a certification process and an occupational task analysis). All of these devices follow a similar process of reorganizing and reformulating actual activity and expertise into prescribed categories, objectifying thoughts and action for management and administrative purposes. Individual knowledge and skills are removed from the property of the individual, disengaging and distancing learners in the process. The devices also coordinate a professional discourse for educators who are compelled to use the discourse to demonstrate their professional commitment and expertise, even if they recognize that the language distances them from learners and the learning process.

Regulatory Frame of Competency-based Curriculum Development

The three devices share a common methodological heritage: competency-based curriculum development. First described and promoted as a curriculum development technique over a century ago, competency-based methods have become ubiquitous in education, including higher education. Competency-based methods provide a regulatory frame for the development of all the curricular devices described.

Regulatory frames are “discursive procedures that organize how something is to be interpreted” (Smith, 2005, p. 227). The frames provide “instructions for interpreting the texts” and “orient the production of a text” (ibid.). Understanding the concept was useful to me in two ways. First, I was able to recognize the similarity between the Essential Skills, a competency-based curriculum compendium of job tasks, the DACUM, and the overall approach to developing learning outcomes or objectives. Second, having learned how regulatory frames operate in one situation, I could use this knowledge to explore another situation: the development of the international literacy test.

Competency-based curriculum development originated in the early 1900s as part of the scientific management movement in education. Principles of the scientific management of work and production, promoted by Frederick Winslow Taylor, were turned into a series of techniques for describing learning objectives, instruction and evaluation. The intent of the approach was to ensure that all those involved in education—students, teachers, principals and parents—would know at all times what needs to be accomplished in the classroom, whether or not it was accomplished, and with what level of proficiency. The aim was to organize and demarcate content, learning activities and pedagogy in order to provide a ‘common language’ that could be used to describe classroom accomplishments.

The main proponent of the method, Franklin Bobbitt described the approach:

The central theory is simple. Human life, however varied, consists in the performance of specific activities. Education that prepares for life is one that prepares . . . for these specific activities. However numerous and diverse they may be . . . they can be discovered. This requires only that one go out into the world of affairs and discover the particulars of which these affairs consist. These will show the abilities, attitudes,

habits, appreciations, and forms of knowledge that men need. These will be the objectives of the curriculum. They will be numerous, definite, and particularized. The curriculum will then be that series of experiences which children and youth must have by way of attaining those objectives . . . that series of things which children and youth must do and experience by way of developing abilities to do the things well that make up the affairs of adult life; and to be in all respects what adults should be (Bobbitt, 1918, p. 42 in Jackson, 1988, pp. 21-22).

An important aspect of the competency-based approach is the emphasis on the development of ‘basic skills’ in order to prepare students for full participation in life endeavours beyond the school. To ensure that the ‘basic skills’ are acquired, they are stated in terms of outcomes that are “seen as the single most important feature of the competency approach” (p. 26). Underlying such an approach is a seductive ‘common sense’ message, writes Jackson, that carries promises of ‘neutrality and objectivity’. Extensive critique has been aimed at the “irremediably reductionist” nature of competency-based curriculum development due to its behaviourist foundations “resulting in a focus on narrow, even trivial educational goals” (p. 32). Learning is reduced to measurable performance, and teaching is reduced to a series of procedures, displacing complexity and in-depth and expansive knowledge building.

Jackson’s historical analysis provides the framework to explicate the basic principles and processes involved in any effort to devise competencies in an education setting, also

alternatively referred to as outcomes, objectives, goals and standards. Although terminology changes in various jurisdictions and projects, the procedures are similar and immediately recognizable to anyone who has ever been involved in a project to designate learning competencies.⁷

1. Identify and assemble a source of expertise to develop the outcomes/competencies/standards/objectives. This is often an ‘expert’ group but could also include the use of previously developed statements and frameworks devised for similar education and training purposes.
2. Devise an over-arching categorization system, ensuring that the categories are discrete enough to be observed for assessment and evaluation purposes. Not considered are unobservable processes such as critical analysis, personal learning growth, greater independence and confidence, etc.
3. Develop supporting categories, if the main categories (e.g., reading) are broad, again adhering to the principle of observable activity for evaluation and assessment. Such supporting categories align with the ways in which we assess the broader categories (i.e. spelling, grammar, formatting a document, etc.) and the tools developed for assessment purposes rather than how skills and abilities are learned.
4. Arrange the categorizations into a hierarchy in order to indicate ‘progress’. Again, the hierarchical system may be related to assessment tools that will be used. In addition to ensuring that the competency is observable, it may also need to be observable across levels of difficulty.

⁷ A very similar procedure is used in human resource management to designate competencies or standards for employees as part of employee evaluation processes.

This framework is used to analyse the Essential Skills in Chapter 5 and the Ontario Adult Literacy Curriculum Framework in Chapter 6, two competency-based curriculum projects. Understanding their operation allowed me to see how and why aspects of the ILT became so appealing in curriculum development work, and how the intersection between large-scale literacy testing and curriculum development was bound to happen.

Exploring the Intersection of Large-Scale Testing and Curricular Devices. In IE terms, the Essential Skills and the OALCF are also intertextual devices, a hybrid of organizing texts that operate in interdependent and hierarchical ways (Smith, 2005). They both start off as curriculum development projects, relying on the basic principles of competency-based curriculum development, shown in the first column of the table below. Then, in order to do this work, the general questions in the second column have to be figured out.

Table 1: Procedures and Questions to Construct an Intertextual Curricular Device

Procedures for Constructing a Curricular Device	Questions that Will Need to be Answered When Constructing the Device
Identify and assemble a source of expertise to develop the outcomes/competencies/standards/objectives.	What kind of expertise? Curriculum development, teaching, assessment, other?
Devise an over-arching categorization system, ensuring that the categories are discrete enough to be observed for assessment and evaluation purposes. Consider particular assessment and evaluation methods.	Where do the categories come from? What assessment tools will be used?
Develop supporting categories if the main categories (e.g., reading) are broad, again adhering to the principle of observable activity for evaluation and assessment. Such support categories often align with the ways in which we actually assess the broader categories and the tools developed for assessment purposes.	What assessment tools? How can categories connect to these tools?
Arrange the categorizations into a hierarchy in order to indicate development or difficulty. The hierarchical system may be related to assessment tools that will be used. In addition to ensuring that the competency is observable, it may also need to be observable across levels of difficulty.	What will be used to establish the hierarchy? How does the hierarchy connect to assessment tools? Does the system allow more discrete observation and measurement?

Both the OALCF and Essential Skills, as will be described, were conceived from the outset to find a way to integrate the ILT texts. The use of the ILT is hooked into broader policy concerns about the management and monitoring of literacy.

Data Collection⁸

IE relies primarily on ethnographic approaches to carry out a research project.

Researchers draw on ethnographic methods in a broad and generalized way without focusing on any particular approach (McCoy, 2008). “Institutional ethnographers use interviews, observation, reflection on their own experiences, photographs, text analysis, and the examination of naturally occurring language, fitting the method to the practicality of the research setting, as well as the relations to be explored...”(p. 705).

My study drew on a full range of ethnographic methods—interviews, participant-observation, reflection on my own experiences and textual analysis. Like many other IE studies, mine focuses on the work of frontline professionals, who are the link between clients, students or patients, and ruling discourses (DeVault & McCoy, 2006). To understand the work of adult literacy educators and how it is organized by particular texts I had to assemble “the different work knowledges of people situated and contributing differently” (p. 160) to the day-to-day teaching work. I spoke to people in a variety of

⁸ I began data collection in the fall of 2009, and then extended the initial ethics approval for two additional years. (REB approvals can be found in Appendices C, D and E.). The first extension was requested to accommodate data collection while I worked as a curriculum developer on the OALCF. The third extension was requested to continue data collection as the OALCF was introduced to the field.

different roles related to adult literacy education including educators, curriculum developers, policy-makers and consultants. I also collected a wide range of documents.

An institutional arrangement has already been put together. The aim of data collection is to explicate this arrangement, which can be traced by observing, listening to and reading about the work (projects, decisions, activities) of policy-makers, curriculum developers, policy entrepreneurs, program coordinators, teachers and learners, and by drawing on my own experiences.

Interviews

A total of 26 people were involved in sharing their experiences through informal conversation, group discussion and more formally arranged interviews. The table below provides an overview of the interview formats with a variety of informants.

Table 2: Role of Informants and Interview Formats

	Role of Informants in Adult Literacy Education	Interview formats
Educators	Work directly with adults in programs	Group interview with 13 educators Individual interviews with three educators
Program coordinators	May have various titles such as manager, executive director or lead but work directly with educators and are responsible (may not be solely responsible) for ensuring the program is complying with ministry accountability requirements	Individual interviews with three program coordinators
Policy-makers	Work in a government department or ministry that makes decisions about funding, program development and program management	Group interview with two federal policy-makers
Support organization coordinator	Work in an organization at the provincial or federal levels that provides general literacy development support, most of which is focused on the workplace	Individual interview with one support organization coordinator

Consultants (program and curriculum development)	Work independently most often on contracts (curriculum development, new directions and implementing current policy and processes, research) for literacy support organizations; all had previously worked as educators and/or as program coordinators or as policy-makers	Interviews and conversations with two provincial curriculum development consultants and two national program development consultants
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On three occasions an individual had more than one role or referred to a past role and their experiences. For example, a program coordinator also spoke about her experiences as an educator, and a support organization coordinator was also a curriculum developer for a project. When referencing their quotations in the thesis I use their roles in accordance with the topic of conversation. But in the overview above I include them only in their prevalent or current role. In other words, they have not been counted twice in the total.

All interviews were transcribed from my own notes and audio-recordings. Two interviews were not recorded; one informant did not give her permission, and the audio-recorder didn't work in another interview. Interviews lasted about one hour, resulting in approximately 150 single-spaced pages of transcriptions. I returned individual transcripts to informants for verification. Very few modifications were made. I also posed a couple of questions during this process to gain additional information or clarification. Responses were typed by participants directly into the text or in accompanying emails. In a couple of cases, with informants with whom I had regular contact, I added further information with their permission after conversations that we had in the context of our day-to-day work. I used the following questions as a guide when conducting more formal interviews:

- Describe your current work.

- Describe your work with the ES (or ILT-type assessment).
- What sorts of resources are most useful, including people?
- What is the project? How did it unfold?
- What did you do, what did others do?
- Were there any challenges?
- What surprised you?
- What would you change if you did the same work again?

Subsequent interviews, except with the policy-makers, touched on each question and topic in a conversational and open way. The interview with policy-makers evolved to be more about the work of their department rather than their own work within the department (i.e. this is what we do in the department; this is why it is important; here's some background about development, etc.). I interviewed two people together (their suggested arrangement) so perhaps there was little opportunity for either individual to be more candid about his or her personal work.

Participant-observation

Participant-observation occurred when I attended and participated in four educator training sessions. One was focused on the use of the Essential Skills for instructional purposes; and one was focused on the use of the underpinning models used to construct ILT test tasks for instructional purposes. The third and fourth sessions were related to using and implementing the OALCF. I collected documents during these sessions and made detailed notes of keynote presentations made in the first two sessions, including verbatim quotations. During the actual training sessions and workshops I made some general field notes, and then approached individuals afterwards to ask if they would be interested in participating in an in-depth interview. After listening to the keynote

speakers, I conducted extensive on-line searches for documents, on-line presentations, reports and other information connected to their work.

Collected Documents

I collected over one hundred documents that I categorized into the following three groups: 1) program management documents used in Ontario literacy programs; 2) curriculum documents related to the Essential Skills and OALCF; and 3) published research reports, technical reports (published and unpublished) that describe that development of the ILT and Essential Skills. I initially read, sorted, made notes and created chronological tables to gain the following insights: an understanding of how and why the Essential Skills and ILT were developed, the main people involved, modifications and changes over the years, and stated reasons for needing the curricular device and testing technology in the first place.

My Experiences

During the data collection period I worked part-time as a program coordinator and as an OALCF curriculum developer. Both jobs were incredibly timely. As a program coordinator, I was altered to changes being made to prepare for the shift from using program activity measures (i.e. learner targets, contact hours, transitions to employment, further education, etc.) to using program outcomes (i.e. learner progress, goal completion and learner gains) to allocate funding. I arrived at the half-way point of Ontario's curriculum development project, and naively thought there was a chance to shift it away from the Essential Skills and ILT. There wasn't. The work was frustrating, acrimonious and generally baffling. The experience propelled me further to find a way to figure out what was happening and why.

All data was sorted and labelled using both paper and on-line files. Paper files were labelled and sorted in a file box. I used a note-taking organizer (i.e. MS One Note) for the electronic files, including my notes and interview transcripts. The program allowed me to assemble and reassemble data in discrete sections and subsections in an electronic notebook. I could then readily sort and organize information, add files, screen captures, video, slide presentations, scans and images. I could also search the items in the notebook.

Data Analysis

Finding a way to organize and understand the data was initially challenging. I experienced what Smith (2005) calls “institutional capture”, in which I could only recognize what was happening within the terms and processes of the institutional arrangement. In other words, I was not able to step back from the data and put IE concepts to their full use in order to recognize the sequences of textual coordination. I supplemented tenuous understandings of textual coordination with an over-emphasis on people’s roles and activities, referred to as “analytic drift” (McCoy, 2006). After an initial write-up of the thesis was completed, I continued to do a deeper analysis to fully explicate the texts and how people put them to use. I was looking at the data to find “an actual moment when a concept is brought into play as a constituent of and coordinating a sequence of action” (Smith, 1997, p. 42). I was guided by a series of general questions designed to focus analytical attention on people’s work and its articulation to the institutional order (McCoy, 2006):

- What is the particular text put to use (e.g., the list of nine Essential Skills, sets descriptors of learning, statistics and levels from the ILT, etc.)?

- How is this text being used in teaching and learning? What do learners have to do? What does the teacher do? How is the teacher directed to use the text?
- How are texts from the Essential Skills and ILT used in policy development? For what purpose?
- Once the text enters into policy and curricular work what is disregarded or pushed aside? How does the text set limits around teaching and learning work so some things are included and other things are not? How are people included or excluded? Why is this being done? How does this play out for learners, for educators and for programs?

Understanding that the texts *within* the technologies are also mediated texts that come from elsewhere allowed me to open up my investigation, and at the same time, gain a deeper understanding of the textual coordination in policy and curriculum work. I devised my own set of questions to guide further analysis:

- How were the texts in the ES/ILT developed, using what processes and regulatory frames? What “instructions” for developing the texts are provided directly or indirectly?
- What choices do test developers and curriculum developers make in order to adhere to the regulatory processes? What is included and excluded?
- What new or reformulated texts are produced? And which specific texts are used within adult literacy education?

Accuracy

Two different accuracy processes were undertaken. In the first process, the accuracy of the accounts depicting people’s work knowledge was scrutinized by the informants themselves (Campbell, 2006). As mentioned previously, informants made only minor changes to their transcripts. An informal accuracy measure is the informants’ ‘so-what’ response (L. Warren, personal communication, October 2008). If they are reading an

account of their work knowledge that is accurate, they won't likely see anything that is surprising or extra-ordinary. In the second accuracy process, accounts of hooking up and connection were (and continue to be) scrutinized (D. Smith, personal communication, October 2008). The accounts of textual coordination may not be recognizable at first to participants themselves, as they explicate the ways in which their everyday experiences are coordinated beyond them. The accuracy of the coordinated sequences can be confirmed when points of connection from a regulating text, to a device, to day-to-day teaching and learning can be made. I point out the details of these sequences using a number of tables throughout the empirical chapters.

Study Limitations

The findings describe *instances* of the use of coordinating texts in adult literacy education, and do not indicate prevalence, intensity or frequency of use. Some instances, however, particularly related to the OALCF point to widespread and on-going problems as the texts become part of program management frameworks. The findings should be read as a mapping of the institutional arrangement (Smith, 2005), a mapping that traces sequences of textually coordinated action and transposition from an international testing initiative, to curriculum and policy development, and into teaching practice. The mapping also explicitly demarcates the texts to pay attention to, whether an educator, policy-maker, curriculum developer or even test developer.

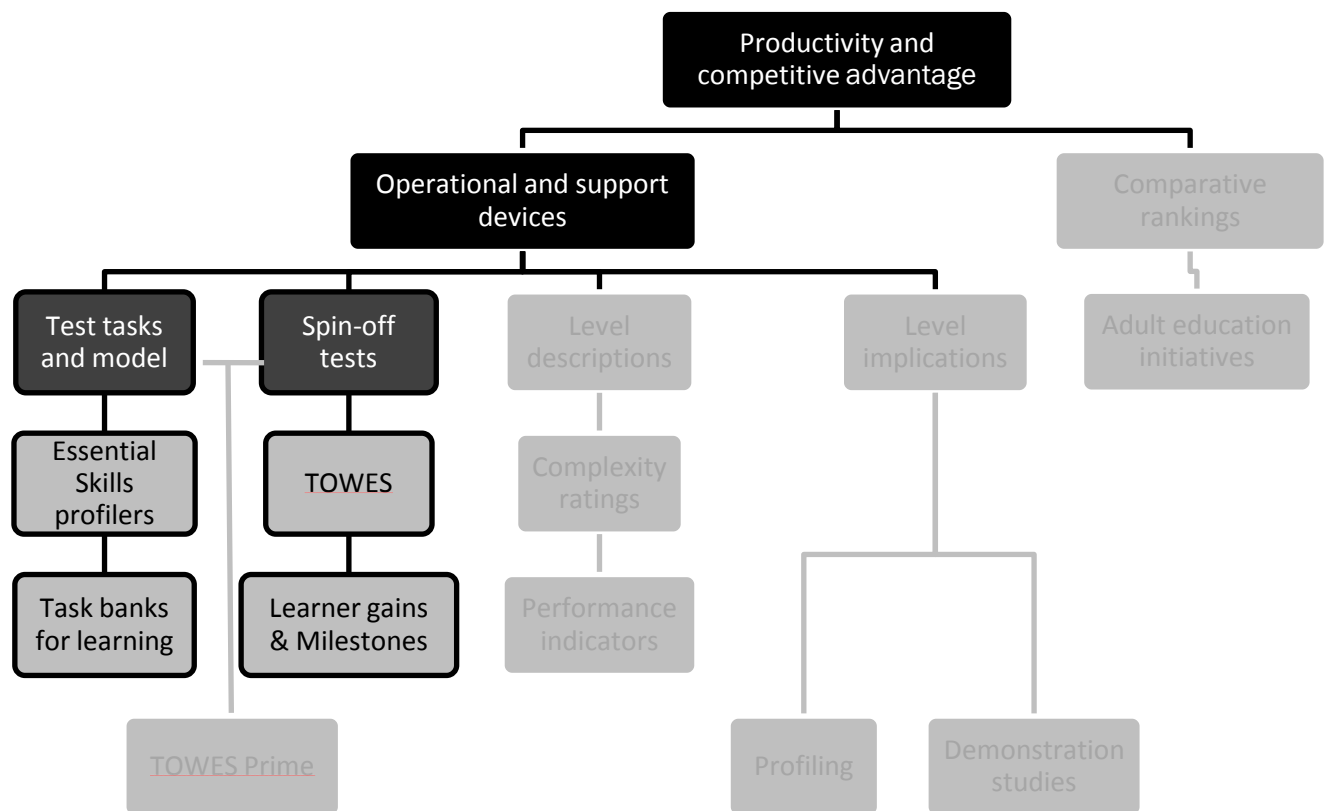
My interpretation of methodological concepts emphasizes their usefulness in a textual analysis. The ethnographic aspect and accompanying in-depth descriptions of experiences within an institutional arrangement are more limited compared to some IE studies.

However, it was only by using ethnographic methods—participant-observation in

particular—that I was able to piece together this analytical account. Listening to program coordinators and educators ask questions, express confusion and sometimes enthusiasm for the new curriculum also directed my attention to and deepened my understandings of textual processes. The first-hand accounts elicited in interviews with educators and program coordinators are the most compelling aspect of the findings. Although the textual analysis is emphasized, ethnography is the lifeblood of the analysis.

Another limitation of the analysis is my decision not to include learners. At the time, even though I worked in a literacy program and could readily ask learners to participate, their experiences with the Essential Skills and ILT spin-off tests had been intentionally limited in our program. Ideally, I would have liked to have been able to talk to a group of learners in another program, who had just finished a course that emphasized some aspect of the Essential Skills, or who had just completed a spin-off test, such as the Test of Workplace Essential Skills (TOWES). Unfortunately, I did not have this sort of access during data collection. By the time learners had to complete mandated OALCF assessments, the data collection period had ended. The experiences of learners and educators using the mandated assessments need to be investigated further.

4. Designing and Using a Test of Cognitive Processing



The first of four empirical chapters is focused on the test tasks, their development using item response theory and the operation of the test tasks. Their operation is important to understand as programs incorporate the use of spin-off tests, which operate similarly to the ILT test tasks. The test tasks and related spin-offs are distinct from other reading tests (i.e. those focused on reading comprehension, vocabulary development, grammar, etc.). First, they don't measure reading skills and are not directly concerned with the presence and use of those skills in an individual. While reading tests are indeed limited and subject to much critique, they are widely used in education. They are also tightly tied to curriculum and day-to-day teaching and learning in the school system. Introducing a

spin-off test that operates differently means that it is disconnected from curriculum and school-based literacy learning pedagogy. Secondly, the ILT test tasks and related spin-offs are promoted as ‘authentic’ tests, able to provide more ‘relevant’ and ‘meaningful’ measures of adult abilities. However, the analysis reveals a stark difference between the operation of the tests and actual problem-solving abilities. In essence, the ILT tests and spin-offs require an individual to forgo their experience reading similar texts, and instead rely on their test-taking knowledge and expertise. While this is not surprising, it is the promotion of the tests as ‘authentic’ and more ‘relevant’ to the lives of adults that is problematic.

IE's concept of regulatory frames is used to explicate how item response theory directs the development of test tasks in the ILT, which then has implications for policy, pedagogy and practice. To demonstrate the operation of item response theory, I provide a step-by-step analysis of an example test task developed for the ILT. I then examine what I call spin-off technologies, a series of tests that adhere to ILT principles and processes, developed for program and individual use. The spin-offs are operational models of the ILT, introducing its novel conceptualization and operation of literacy to teachers and learners. I provide an account of taking one of these tests with a colleague. We discuss our confusions and frustrations when our expectations about the operation of the test are circumvented. The use of the tests has also been mandated by federal and provincial governments in order to receive funding to support various literacy projects (i.e. a workplace partnership and training program, a job readiness curriculum and course). In one project, the use of the test threatens a partnership being negotiated between a literacy

program and employer. In the other project, the meaning and relevance of the test results for both the learners and curriculum is questioned.

Principles of Item Response Theory Used to Develop Test Tasks

Item response theory is the “analytic technology” or framework that is used to guide the development of the test tasks in the ILT. As a guiding framework, it is doing exactly what it was designed to do: create test tasks that are independent of language, culture, and, I would add, the way people encounter and use various print-based materials in their lives. A particular contribution of the testing initiative, states one of the ILT researchers, is that “it did demonstrate that the analytic technology is independent of language and probably of culture” (Jones, 2005, p. 51). The test tasks used in the ILT initiative are the first to use item response theory rather than classical test theory as an approach to measuring adult literacy in large-scale testing.⁹ IRT is very much aligned with a resource management conceptualization of literacy. The concern is not to devise a test that provides individual scores, but to “provide reliable and valid information about the distribution of skills in populations and subgroups within and among various populations” (Kirsch, 2003, p. 182). In other words, the concern here is not with literacy as a property of individuals but with literacy as a resource that is distributed across populations. In accordance with IRT, the individual is measured against pre-set values based on an estimation of a correct

⁹ Item response theory is also used to guide the development of the test tasks developed for the Programme for the International Student Assessment (PISA), which is also overseen by the OECD.

response. Their actual performance or ability to complete a test task is merely used as a means of locating the individual in an item response model. The model and the performance of the model is the fundamental concern of test developers and psychometricians. It is reproduced in the figure below (Mosenthal, 1998, p. 271).

The x-axis displays the scores of test tasks and represents the difficulty of items. The y-axis displays the probability that an individual will respond correctly, where 1.0 is perfect probability and .00 is no probability. The probability of correctly answering an item is small for those at low ability levels and increases for those at higher ability levels. The most likely level of the literacy trait that the test-taker has is not measured on its own, but is an estimate. Performance on an initial task locates the individual in the model, and then performance on subsequent tasks solidifies that location. In addition, a control is used for guessing. The response probability or RP value controls the likelihood that a person is

Figure 3: ILT Item Response Model

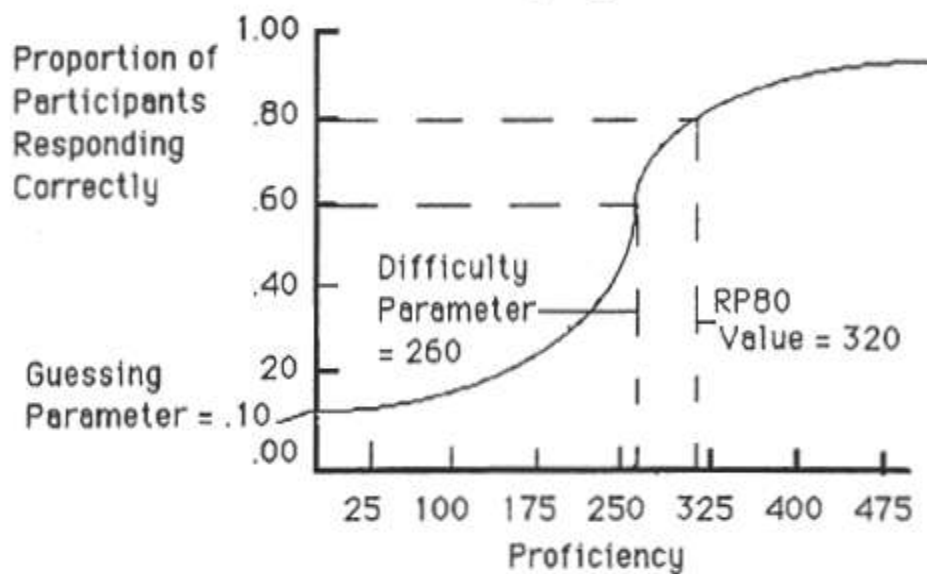


Figure 1. The three-parameter IRT model

guessing a response. A high RP value, such as RP80, which was used in the first two rounds of testing, substantially reduces the likelihood that an individual arrived at a response through guessing. To summarize, IRT is used to develop measures that estimate the likelihood of correct responses in the population at various points of difficulty while controlling for guessing.

The building block of item response theory is what is called the “item characteristic curve” and “all the other constructs of the theory depend upon this curve” (Baker, 2001, p. 7). Developing something that can produce the various points of difficulty is the aim of the test development process. People’s abilities do not produce the points of difficulty. In other words, individual scores and performance are not plotted along the x-axis. The test tasks produce difficulty. My analysis of item response theory is directed only at the regulatory principles that are used to guide the development of a test task, and not its highly complex psychometric processes. The regulatory principles establish what the test task should measure, how the measurement should be obtained, and a protocol that turns textual processes into numbers that can then be used to supply the modelling work of psychometricians.

Critique of the Response Probability Value

Use of an 80% response probability (RP80) criterion has resulted in two serious issues according to one adult literacy researcher (Sticht, 2001, 2011). First, adults are denied the opportunity to demonstrate competence, and are prevented from attempting tasks at higher levels with such a high RP value. With a lower RP value, test-takers would be able to attempt and possibly show proficiency with harder test tasks. Second, the 80% response probability criterion results in more incorrect predictions that a person could *not*

do a task when they actually could than predictions that a person could *do* a task when they couldn't. Overall, "competent adults were more likely to falsely be called incompetent in literacy" (Sticht, 2011, n.p.). If a lower probability criterion were used, more adults would be categorized into higher levels. PIAAC managers have lowered the 80% probability criterion to 67%, which was recommended nearly a decade ago in a report from the National Academies of Science, National Research Council (NAS/NRC) (Sticht, 2013). This lowered criterion is still not 50%, a more equitable and fair criterion, argues Sticht, which is used traditionally when creating scales "because it produces equal probabilities of saying someone cannot do something when they can, as opposed to saying someone can do something when they cannot" (n.p.).

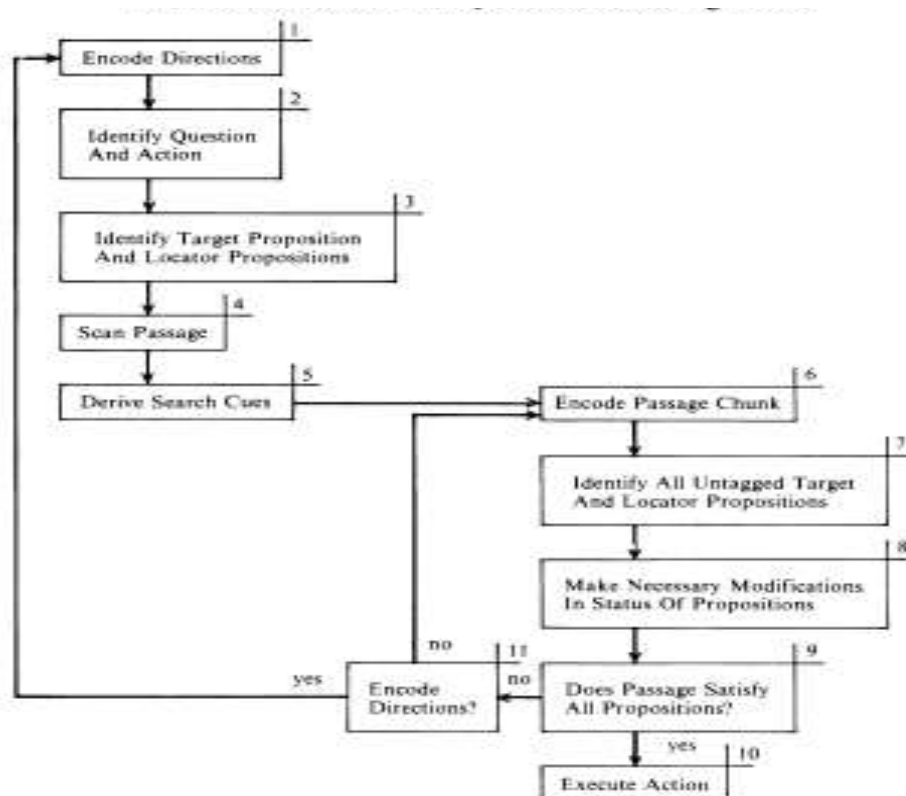
Constructing Difficulty and the Locating Information Model

To construct test tasks that could produce a range of difficulty points, test developers had to first come up with a set of parameters that established difficulty. Further, the parameters would have to be discrete enough to be assigned a numerical value for scoring and modelling. Developers describe the process of constructing a model of difficulty that would eventually be used as a basis for the ILT test tasks. The model was not based on elements that make learning to read difficult, such as developing vocabulary, fluency and comprehension. Rather, it was based on elements that cause difficulty amongst those who have already acquired reading abilities. Furthermore, the model of difficulty was limited to understanding what makes test-taking itself difficult, a very specific kind of reading ability, as it was derived from an analysis of errors that test-takers made on previous literacy tests. The model is also used to establish a distinction between the processing of information (the focus of measurement in ILT test tasks) and the ability to use linguistic

skills. It also becomes the basis for the development of an on-line instructional system, which will be examined in Chapter 7.

The first step in model development involved the creation of a preliminary model of a question-answer process, which was then used to analyse the errors adults made on a previous test of functional literacy. The model is focused on the use of WH-questions (who, what, where, when, why and how). In the error analysis model, a “target proposition” (WH-question) is used to guide the respondent in locating “targets” referred to as “locator propositions” (various answers). The model, reproduced below, illustrates “information flow” in the “question-answer process” (Fisher, 1977, p. 423). The model is

Figure 4: Preliminary Model of Difficulty



designed to represent “isolated unit[s] of behavior in the question-answering process” (ibid.). It is derived from early and simplistic computational understandings of computer-processing, such as encode, identify, scan, modify and execute. A total of eleven discrete steps are constructed to explain the flow of information in the question-answer process. After its development, the model was used to classify errors previously identified on a test of functional literacy for adults. The strength of the model, state ILT test developers, is that it distinguishes between “process errors” and “deficit errors” (i.e. absence of linguistic skills and knowledge) (Kirsch & Guthrie, 1980). Perhaps inspired by the following statement, made by the model’s developer, ILT test developers proceeded to work out a way to devise a test based on a distinction between processing information and the use of linguistic skills in comprehending and responding to that information:

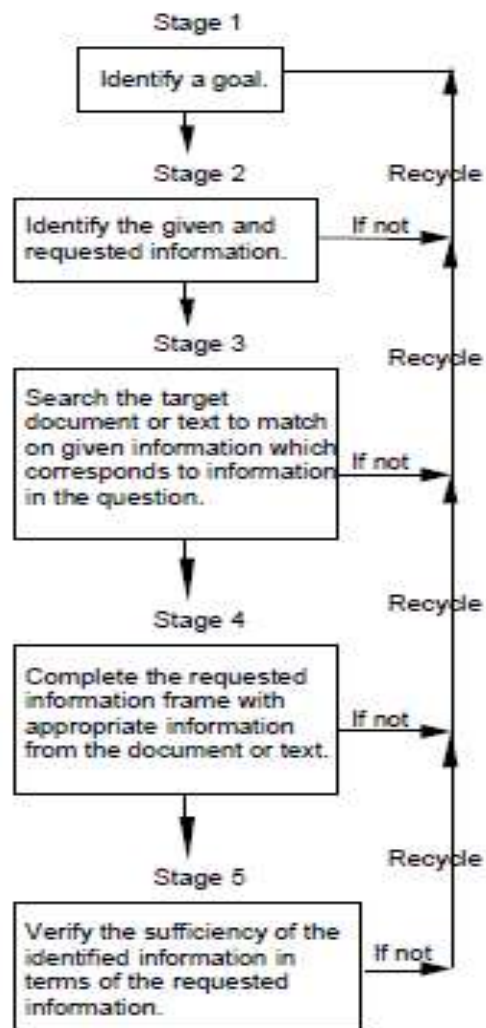
In short, if the definition of functional literacy were to incorporate the distinction between process oriented errors and deficit oriented errors, then the problems which currently muddy the interpretation of functional literacy could well disappear (Fisher, 1977, p. 444).

Hence the ILT is focused on processing information, and not on reading skills commonly used in testing and school-based curricula.

The final locating information model used in the ILT (after the preliminary error analysis model an additional model was devised and later modified) is comprised of five processing stages and a series of yes/no decisions. In the model, shown in the figure on the next page, an individual first identifies a goal (this would be the test question), then identifies “given” and “requested” information, searches the “target document” to “match given information”, then “extracts” details from the text to “complete the requested information frame”, and finally verifies the information. At any stage, the test-taker may

have to “cycle” back to a previous stage in order to complete the task (Kirsch, 2003; Guthrie and Mosenthal, 1987). The processing model is initially called a model of locating information, and later referred to as an information-processing model. I will use the term locating information to avoid confusing the ILT model with the broader and more complex understandings of information-processing in the field of cognitive studies, which did not inform its development.

Figure 5: Five Stage Locating Information Model



The locating information model guides the development of test tasks and accompanying test questions. The texts that are read during testing are indirectly regulated by the model, in so far as the text assembled on the page must allow the model to operate and is aligned to its operation.

In the case of literacy, construct validity refers primarily to the psychological processes required to complete the items on a test. It pertains not to the kinds of information in the items, but to the cognitive operations needed to obtain the required information from the document. It refers not to the subject matter of the test content, but to the relation between the knowledge structure of the examinee and that of the test (Kirsch & Guthrie, 1980, p. 80).

The content of the test tasks, whether “subject matter” or “kinds of information” is not the focus of test development. In other words, the test tasks are not developed to measure one’s understanding and comprehension of what they are reading.

The locating information model is distinct from testing models that continue to be used in the K-12 system. School testing relies primarily on reading comprehension, and not locating information. Factors associated with improving reading comprehension in school are the following:

- Use of background knowledge during reading
- Use of larger and more precise vocabularies
- Ability to draw inferences more frequently and appropriately
- Summarization skills
- Ability to perceive and use text structure more effectively to enhance memory
- Ability to monitor and adjust reading strategies (Guthrie & Mosenthal, 1987).

These factors are commonly tested in both classroom-based assessments and standardized tests, and constitute what could be called a reading comprehension model. In Ontario, for example, the Ontario Secondary School Literacy Test (OSSLT) incorporates all the factors in its test questions. When ILT test developers assessed the differences between the locating information model and a reading comprehension model, they were found to be “psychometrically distinct” (Kirsch & Guthrie, 1984a). “Reading tasks that required comprehending and remembering lengthy sections of text were independent, statistically, from tasks that required locating specific details in manuals, schematics, and periodicals” (Guthrie & Kirsch, 1987, p. 226). Further, the researchers explain, the ability of test-takers to complete questions structured to reflect each of the models depended on their reading experiences. In other words, if they spent more of their time locating specific details in manuals compared to comprehending and remembering lengthy sections of text, they performed better on the locating information questions. The distinction between locating information and reading comprehension plays out in testing, pedagogy and the performance management framework in Ontario’s new adult literacy curriculum, and is analysed in Chapter 6.

Complex Scoring Protocols Activate the Locating Information Model

Five variables that made test tasks difficult were established. The five variables are the following: 1) the type of processing involved, which entails locating, cycling, integrating and generating information; 2) the type of information being requested, from concrete information (naming things) to abstract information (comparing things and ideas); 3) the type of match or connection between the question and correct answer; 4) the length and complexity of the text itself; and 5) the plausibility of distractors within the text, or

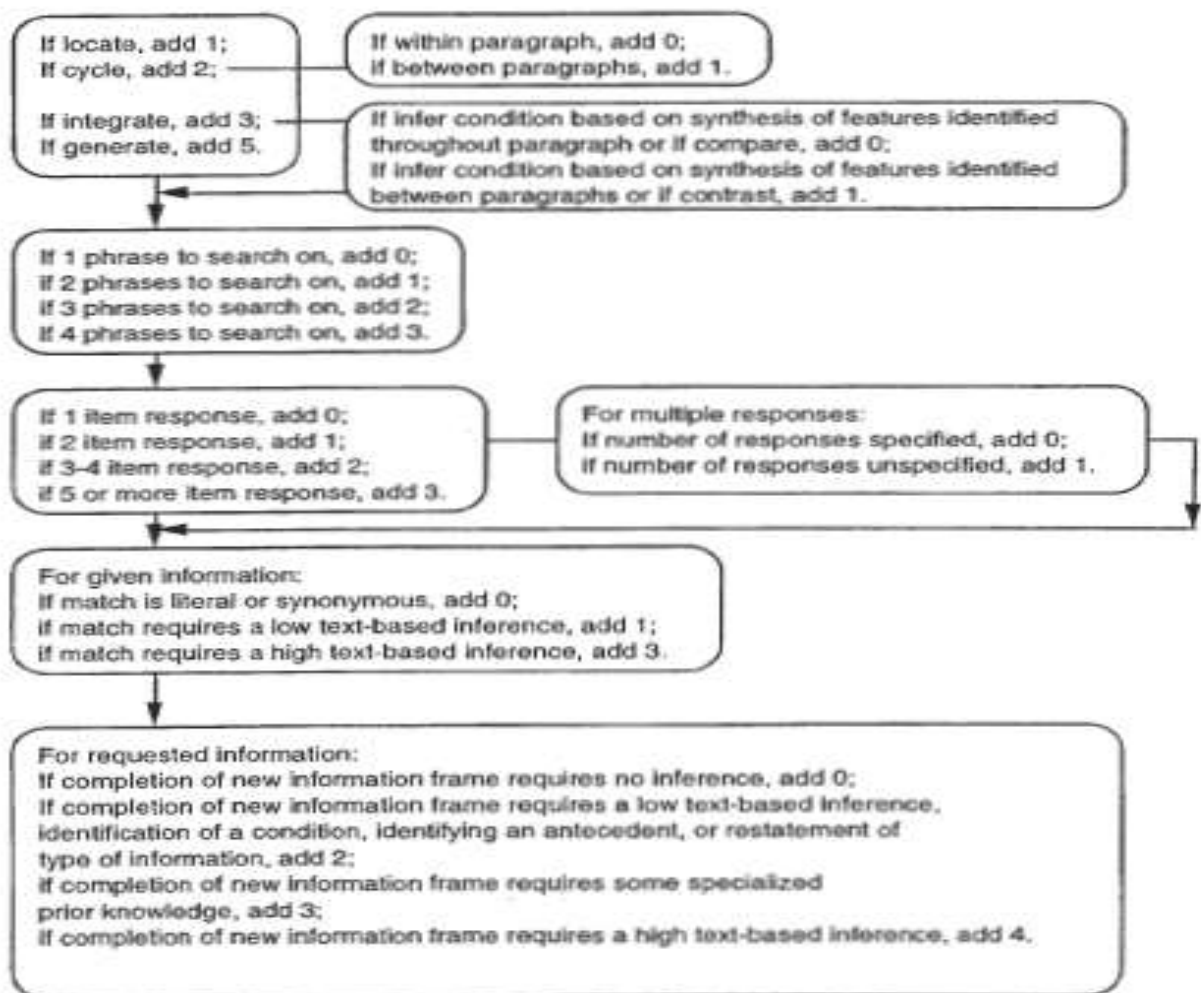
amount and location of information that could create conditions that distract the test-taker from finding the right answer (Kirsch, 2001). Then, highly complex scoring protocols using what is called an “extensive grammar” were devised based on the variables (Kirsch, et al., 2001).

To generate scores based on the length and complexity of the text itself, readability for length and complexity of the text is assessed using the Fry method. Reading difficulty ranged from grade levels 2-15 with a mean readability of grade 8 (Mosenthal, 1998). The other four categories, the ones that get at cognitive processing (i.e. type of processing, type of requested information, type of match and plausibility of distractors) are articulated to a set of complex scoring protocols and procedures. The figure below is an example of the scoring protocol used to score test tasks developed for prose test tasks, one of three test task domains (i.e. prose, document and quantitative) (Kirsch, 2001, p. 55).

What one can say about a test-taker’s abilities is dictated by the scoring protocols. For example, upon successful completion of a test task a respondent can possibly locate information if target is within a paragraph and requires three cycles; and given information requires a low text-based inference; and requested information requires a low text-based inference, identification of a condition, identification of an antecedent, or restatement of information. What this means in the context of day-to-day literacy practices is unknown.

The extensive scoring protocols and procedures are needed to adhere to an IRT principle that regulates test task development: the test item or test task is a “stimulus” that is constructed in order to elicit predetermined sets of responses. “The items are modeled as stimuli that each function as a little experiment independent of the others” (Sijtsma & Junker, 2006, p. 81). An additional consideration when constructing test tasks as stimuli is “local independence” to ensure that each test task operates as a “little experiment”

Figure 6: Scoring Protocol for Prose Processing



(ibid.). According to the principle of local independence, test-takers should not be able to draw on their knowledge about the operation of the test,¹⁰ nor should they be able to use their experience with similar looking textual formats in order to respond to test questions. The test tasks are intentionally designed to prevent test-takers from using actual problem-solving abilities that may be put to use when responding to similar looking texts. This is accomplished by ‘burying’ the desired responses with ‘distracting’ information. In order to find the answer to a test question “the appropriate information had to be extracted from other related but inappropriate information to arrive at the best answer” (Kirsch & Guthrie, 1980, p. 85). Once test task modelling procedures are established, a bank of tasks can be developed for on-going use. Approximately 60% of the test tasks used in the third round of ILT testing (i.e. PIAAC) were used in the first two rounds of testing (i.e. IALS and ALLSS) (OECD, 2013).

How IRT and the Locating Information Model Operate in a Test Task

The highly complex scoring protocols that direct the development of test questions and assembled print-based materials elicit a series of cognitive processes that are unique to the testing situation. To respond to the questions, an individual must draw on and assemble unique abilities that are not called upon in the same way outside the testing

10 However, when one sample was retested, they had significantly higher scores the second time around (Carey, 2000 in St. Clair, 2012). The test-takers were likely learning how to do the test, becoming more aware of test-taking conventions and the particular cognitive processing demands of the test.

situation. Furthermore, since the focus of test development is on processing, and not the content or information used, misinformation and even incorrect or harmful information may be present in a test task, as demonstrated in the example that is analysed in this section. The unique operation of the test, in combination with the navigation of problematic textual information, presents challenges for any test-taker. The medicine label, reproduced in the figure below (Statistics Canada, 1996, p. 89), was commonly referred to in various reports published after the first round of testing because it is considered the ‘easiest’ task. The analysis will demonstrate, however, that it is a confusing, sometimes contradictory and challenging piece of text to navigate.

Figure 7: Medicine Label Test Task

MEDCO ASPIRIN500

INDICATIONS: Headaches, muscle pains, rheumatic pains, toothaches, earaches. RELIEVES COMMON COLD SYMPTOMS.

DOSAGE: ORAL. 1 or 2 tablets every 6 hours, preferably accompanied by food, for not longer than 7 days. Store in a cool, dry place.

CAUTION: Do not use for gastritis or peptic ulcer. Do not use if taking anticoagulant drugs. Do not use for serious liver illness or bronchial asthma. If taken in large doses and for an extended period, may cause harm to kidneys. Before using this medication for chicken pox or influenza in children, consult with a doctor about Reyes Syndrome, a rare but serious illness. During lactation and pregnancy, consult with a doctor before using this product, especially in the last trimester of pregnancy. If symptoms persist, or in case of an accidental overdose, consult a doctor. Keep out of reach of children.

INGREDIENTS: Each tablet contains:
500 mg acetylsalicylic acid.
Excipient c.b.p. 1 tablet.
Reg. No. 88246


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1000 Industrial Blvd., Montreal, Quebec H4J 3P1

The priority on processing over the actual content or information in test task development means the following errors and confusions are made, and deemed acceptable, in a test.

First, the term Aspirin remains a registered trademark in Canada but not the US (generic brands in Canada use the term ASA or acetylsalicylic acid). Since this product was manufactured in Canada (according to the information in lower left corner), and the ILT never uses trademarked names, one would expect to see the term ASA. Secondly, normally on labels, maximum dose warnings refer to daily doses, accompanied by suggestions to consult a doctor after extended use. This label states the medication should be taken “for not longer than 7 days”, and contains no information about a maximum daily dose. Further, the sentence construction is awkward. In addition, the maximum dosage information is not emphasized, and appears as an afterthought. Thirdly, a bottle of ASA/Aspirin is not marketed to relieve common cold symptoms, likely due to the connection between cold viruses and Reye syndrome (spelled incorrectly on the label), but only general aches and pains. Stating that it can be used to relieve common colds could be contravening acceptable safe labelling practices. Finally, and very importantly, the usual dose in Canada and the US is 325 mg, and not 500 mg of acetylsalicylic acid (also with a spelling mistake on the label). In addition to the complexities involved in navigating and comprehending the text on its own, an additional layer of possible confusion is added when the test question is examined.

The question for this task is the following: “Determine the maximum number of days you should take this medicine.” The desired response is “not longer than 7 days.” There is no direct grammatical connection between the question and potential response. If the test-taker must find the term “not longer than 7 days” why not ask, “How long should the

aspirin be taken?” We can see this happening again with the term maximum. Not only does it not appear on the label, creating that semantic connection for the test-taker, but it is also different from the information on actual labels. Three over-the-counter pain relievers that I looked at all contained the terms maximum or maximum dose. The indirect connections between the test question and desired responses are done intentionally to obscure the correct response. Then, test-takers must suspend their own knowledge, if they know that the usual dose is 325 mg and not 500 mg. Since the Medco dose is higher than the usual dose, it would make real-world sense to take the Aspirin less than seven days, and not respond correctly to the test question. The Medco label demonstrates how the test tasks are disconnected from ‘authentic’ texts and uses of those texts in people’s lives. The Medco test task is similar to most test tasks tests in that it is a highly manipulated and controlled product that requires test-taking expertise, and not actual problem-solving expertise. The concern is that they are promoted as being more ‘authentic’ and ‘relevant’ to the lives of adults. This makes them appealing to policy-makers and educators looking for ways to provide more relevant approaches to assessment in adult literacy programs. Further, since the tests mimic a variety of tests that an adult could encounter, the test-taker makes assumptions about the way the texts should operate, and draws on previous experiences with similar texts to respond to the questions. However, they quickly recognize that the test tasks operate very differently, and will need to draw on their test-taking expertise instead.

Critique of the Test Tasks and their Prescriptive Model of Thought and Action

Despite the claims of ‘authenticity’, the ILT methodology does not consider how the test tasks relate to people’s lives and literacy practices (Darville, 1995; Hamilton and Barton;

2000, Payne 2006). The test presents only a partial picture of literate thought and action that is based on the “logic of the survey methodology” (Hamilton & Barton, 2000), and not what people actually do, even when presented with similar looking texts. In order to adhere to the “logic of the survey methodology”, culture and background knowledge is treated as “error” and “bias” (ibid.).

The three domains—prose, document and quantitative—don’t capture a range of people’s complex problem-solving skills when engaged with literacy related to community-building, religious understandings, and empowerment (Bernardo, 2000). In addition, the ILT ignores the economic contributions of specialized bodies of knowledge and expertise that simply can’t be captured by general literacy measures (Sticht, 2001). Content is focused on the “consumption” of text (St. Clair, 2012). There is no poetry to interpret, no personal narratives to evoke emotions and empathy, no historical texts that raise critical social issues, and no current affairs texts that describe relevant social concerns. The test tasks are comprised of informational and “instrumental” texts about shopping, employment expectations and money management. “The surveys seem to centre on a highly limited set of texts that reflect a highly selective set of text consumption in a developed society” (St. Clair, 2012, p. 770). Developed in and for industrialized countries, the test tasks may reflect uses of texts in limited circumstances in these countries, but it’s questionable if the same uses exist in developing countries (Bernardo, 2000). The test tasks privilege the handling of data-based information over experiential and contextualized information (Valdivielso Gomez, 2000). “The claim that this is a robust indicator of an individual person’s complex multi-layered set of literacy practices has never been fully discussed and must be treated with caution” (St. Clair, 2012, p. 773).

Other researchers have suggested that there are “serious problems” with the quality of the ILT test items, at least those that are available to examine (Henningsen, 2007).

Furthermore, they may be an unfair measure of people’s abilities. When comparing the US and British versions of the test tasks developed for the IALS, several textual confusions and errors were noted as a result of using US conventions for a British population (Hamilton & Barton, 2000). The test tasks operated differently in different countries and different language jurisdictions (i.e. between France and French-speaking Switzerland). This is referred to as differential item functioning. Test managers were cautioned against using the results to compare countries (St. Clair, 2012) due to differential item functioning. The issue of comparability was one of the reasons that France withdrew its data from the IALS in the early 1990s, and researchers cautioned against using the results to make international comparisons (Blum, Goldstein & Guérin-Pace, 2001).

When analysing the development of a test item as part of UNESCO’s Literacy Assessment and Monitoring Program (LAMP) ¹¹Maddox (2013) observed that test-takers in Mongolia who are knowledgeable about the content of a test task (in this instance it was a common type of camel in Mongolia) performed *worse* on the test than those who were not familiar with the content. Based on a different analysis at of test items, another

¹¹ The LAMP testing initiative uses the same test development technology as all OECD organized ILT initiatives.

researcher explains that “implicit assumptions are not borne out in the real life situation that they [the test items] are modelling” (Henningsen, 2007, n.p). In other words, a test-taker is set up. By mimicking actual texts and documents and claiming that they are ‘authentic’, it looks as if one can draw on experience to respond. But in order to answer the question correctly, a respondent must draw on a unique set of cognitive processing skills and test-taking expertise. The claim of ‘authenticity’ in the face of testing conventions and manipulation of expectations is inherently unfair to a test-taker, particularly one who has limited experience with test-taking. Imagery used in the test tasks also contradicts implicit assumptions made about the content of the test task. In one task, when a picture of a camel and text are put together a hierarchy is established between the image and the world of camels—and people’s knowledge of them—and finally to the text (Maddox, 2013). People’s efforts to use their real-world knowledge about camels are thwarted. Test-takers who know about camels are more likely to respond incorrectly compared to those who don’t know about camels (ibid.).

Respondents need to draw on other sets of skills, besides their experiential knowledge and expertise, to correctly respond to the test questions. To successfully complete an ILT test task, adults must have experience first and foremost with testing conventions. They need to relate selectively and with caution to actual problem-solving and experience in order to put their test-taking strategies to use. They need to draw on a repertoire of textual problem-solving abilities to troubleshoot faulty and complex texts, and they need perseverance to put up with a highly manipulative testing situation that draws on test-taking experience, and may conflict with their expectations that their own experiences can be used.

The ILT is primarily interested in literacy abilities as cognitive processing. Test developers have reconceptualised literacy so what is measured is no longer just reading and writing, and whether or not a person has acquired abilities and experiences to support the use of those skills. The ILT literacy is focused on measuring “higher-order” cognitive skills that are activated when using printed text (Bernardo, 2000). Other researchers have suggested that the ILT constructs are merely a proxy for other variables that were not measured, such as language proficiency and a myriad of abilities gained in school and on the job (Bonikowska, Green, & Riddell, 2008; Green & Riddell, 2003; Reder, 2009). It’s not the actual constructs or test tasks that are informative, but the unobserved attributes and abilities needed to do the test that likely provide some useful information within the context of education. Despite the critiques and unique operation of the test, three different spin-off tests have been produced for program and individual use.

Development of Spin-off Tests for Program and Individual Use

Spin-off tests incorporate the ILT test task methodology, and have been developed with the assistance of experts who have been involved in the ILT¹². The assessments have been created and marketed in both Canada and the US for over a decade. The European Union

12 Additional informal assessments that draw indirectly on the ILT methodology have also been developed in Canada. They include Measure Up, Ontario Skills Passport assessments, Read Forward, CAMERA and the OALCF milestone assessments. Although these tests adhere to the regulating principles of the ILT test development methods, they do not incorporate its complex scoring protocols and item response modelling. It is beyond the scope of this project to examine all spin-off tests, both the psychometrically aligned tests and the unaligned tests, although it may be a useful project. Only the OALCF milestones and their operation in an accountability system will be examined as part of this study.

is now involved in the development of a third spin-off that incorporates some additional elements related to PIAAC.

One of the first accessible spin-offs was created in the US by the same organization that produced the test tasks used in the ILT—Educational Testing Services. The US spin-off, *Prose Document Quantitative* (PDQ), continues to be available on the ETS web-site.

Soon after, Canada developed the *Test of Workplace Essential Skills* (TOWES), which also uses the ILT test task development framework and methodology. Irwin Kirsch, the main developer of the methodology was involved in the development of both PDQ and TOWES. PDQ's webpage provides a link to the framework document (i.e. Kirsch, 2001) and describes PDQ using word-for-word excerpts from the document. Kirsch and an ETS psychometrician ensured that TOWES had “strong methodological links” to the ILT test task development framework (Yamamoto & Kirsch, 2002).

In the Canadian spin-off, it is not immediately apparent that people are engaging with the ILT testing methodology when they use TOWES. The name obscures the connection with the ILT initiative, unlike PDQ, which is a direct reference to the three domains of test tasks in the IALS and ALLSS. Further, TOWES is marketed as an “Essential Skills assessment” that is aimed at improving workplace productivity (despite the lack of empirical evidence that there is a connection between one's ability to do the test and their workplace performance).

An Essential Skills assessment provides employers and trainers with data to make better informed hiring and training decisions. According to Statistics Canada, 47% of Canadian workers do not possess adequate skills in three areas that are essential for workplace safety and productivity: reading text, document use and numeracy. By improving

Essential Skill levels, workers can increase their productivity and safety at work (TOWES, n.d.).

The website information also highlights uses beyond the workplace. The test can be used “as part of college or institutional training programs, in apprenticeship technical training, as an exit credential, to help establish standards, in research, for prior learning recognition” (ibid.).

The now defunct Canadian Council on Learning (CCL) had developed a spin-off assessment with the assistance of a psychometrician who worked on the IALS. Based on a CCL news release dated March 6, 2009 the ECHO assessment “enables individuals to understand their strengths and where they need improvement.” It was also intended to provide educators with information they could use “to develop programs to respond to individual learner needs.” Rather than acknowledging that there could be a disconnect between the operation of the test and people’s understanding of their abilities and day-to-day literacy demands, efforts have been made to produce the spin-off tests so that “adults with skills below Level 3 recognize the fact that their skills may limit their opportunity in the future” (Murray, et al., 2009, p. 53). The reason that adults ‘fail to recognize’ their ‘limiting’ abilities is that there has been a “market failure of magnificent proportion. At a minimum this suggests the need for a massive social marketing campaign to raise awareness of the issue” (ibid.). In effect, the spin-off tests become an awareness tool in such a campaign.

At the time of writing, the newest spin-off, an online version of the PIAAC called *Education and Skills Online Assessment*, was undergoing field trials. The testing effort is a joint initiative of the OECD and European Union. According to promotional

information, test results will allow individuals to “benchmark themselves with adults of similar background in their country or internationally” (Organization for Economic Cooperation and Development and the European Commission, 2013, p. 1). Further, it can be used by education and training organizations or local governments to “assess the skills of a particular population with the goal of providing training or for research purposes” (ibid.).

The spin-off tests have three main aims: 1) to allow individuals to measure themselves against the ILT standards, particularly those who may be ‘below standard’; 2) to provide educators with instructional supports; and 3) to provide policy-makers with an assessment tool that can be used to measure the outcomes of local education and training initiatives. Similar to the aims of the overall initiative, test results are intended to impel action. Instead of working on a macro policy level, the spin-offs are designed to work at an individual level so people can recognize their ‘problems’ and do something about them.

Ontario is on its way to becoming the first known jurisdiction to mandate the use of an ILT spin-off test in an education and training system. Three instances of their use demonstrate how they are unfair to learners, a barrier to program and workplace partnerships, and disconnected from curriculum and program aims.

Unfair Testing Practices Using ILT Spin-offs: Doing PDQ

The ILT and their spin-off tests are fundamentally distinct from tests commonly used in education. Their focus on cognitive processing rather than linguistic skills and knowledge means they operate differently from tests that both learners and educators are accustomed to using. Similar to the medicine label example, understanding the meaning of

information and the actual printed text is a secondary consideration in spin-off tests.

Information is used as an impetus to make observable the processing abilities that are of primary interest. Such an unexpected reversal in a testing situation within education is confusing for a test-taker. It is also, as will be demonstrated, an unfair testing practice.

The excerpts of a conversation between me and an educator who had previously used PDQ with her students, provides some insights into the operation of the spin-off tests.

Together we talked through our experiences and thoughts when doing the *PDQ Locator Test*, available for a small fee on-line. The discussion below is based primarily on one test item, reproduced in the figure below. Comments were similar when examining other test items. We expected the test to operate in certain ways, and it didn't. We had to continuously figure out what we were being asked to do, and then figure out a way to respond in ways that aligned with the expectations of the test. While any testing situation has its challenges, the unexpected operation of the ILT and its spin-offs presents novel challenges, particularly to those who do not have extensive test-taking experience and limited literacy repertoires.

Question 1: Two friends meet at this restaurant at 5pm for dinner. One orders the Yee Hong Chicken. The other orders the Broiled Pompano Fish. What is the total price of their order before the tax and tip are added?

Figure 8: Example PDQ Test Task



THE NEW CANTON RESTAURANT

Early Bird Specials Daily 3 pm – 7 pm

Served with Boiled Rice **\$6.75** plus tax (No credit cards)

S – 9 Subgum Chicken Chow Mein
 S – 10 Beef Sauteed with Selected Vegetables
 S – 11 Shredded Pork Sauteed with Broccoli, Peppers, and Onions
 S – 12 Yee Hong Chicken (Chicken Sauteed with Broccoli, Peppers, and Onions)
 S – 16 Chicken Chow Fun (Chicken Cooked w. Broad Rice Noodles & Bean Sprouts)
 S – 17 Broccoli Sauteed with Tofu

This Week's Special Bar Pouring Hi-Ball -- \$2.00

ROAST PORK SANDWICH ON GARLIC ROLL	\$6.95
ROAST CHICKEN THIGH, Served with French Fries, Bread & Butter & Tea	\$6.95
CORNED BEEF AND CABBAGE Served with Boiled Potato, Bread & Butter	\$8.25
BROILED POMPANO FISH Served with two (2) vegetables	\$11.75
BROILED T-BONE STEAK Served with Onion Rings, Salad, Potato, Bread & Butter & Tea	\$12.95

Sorry No Substitutions
 MINIMUM IS \$15.00, if charge to Credit Card (all major credit cards accepted)
 Above orders can be served with Soup (Wonton or Egg Drop) for only \$3.00 extra.

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Hours: Mon., Wed., Thurs. 11 am – 1 pm
 • Tues., Fri., Sat. 11 am – midnite • Sun. noon – 11 pm



Christine: So I need to look for the two items. Here is Yee Hong Chicken. But it doesn't have a price, only a code. Oh, these items here are all \$6.75.

Educator: Exactly. I remember my students struggled with that. Where they expected a price to be they saw these codes.

C: What do the codes mean?

E: I guess they're the restaurant's codes for ordering.

C: Why not code everything? When restaurants code like that everything is numbered.

E: It's true, some Asian restaurants do that. They put a number with the dish, but not just some of the dishes.

C: And these aren't in any order— 9, 10, 11, 12, 16, 17.

E: It makes no sense if they paid for this to be printed. Why would they skip the numbers?

We are discovering that that the menu cannot be read based on our experience reading similar menus. It also contains inconsistencies in numbering, which are perplexing. The method of numbering items is unique, and as the educator recalled, students were initially confused when they saw codes in the place of prices. This is an example of how correct information can be buried in other information in the test tasks. It also shows how distractors, in this case, the codes, are used.

Question 2: What is the cost of a side-order of won-ton soup?

C: You have to scan and look for the term won-ton soup.

E: And it's not quite there.

C: You're right. It states, "Above orders can be served with soup (won-ton or egg-drop) for only \$3.00 extra." It's not a direct connection. It's also located in a funny place. Most restaurants put this type of information under the menu items not beside payment information.

Again, the menu is not operating as expected and in a way that is similar to other menus.

This is also another example of the way correct responses can be buried.

Question 3: Which dishes are served with bread and butter?

C: Ugh.

E: I know. That's how you get to feel.

C: So how do you do this? I have to look for the term "bread and butter". I see it once, twice, three times. But the question wants me to identify the dishes. To indicate the answer I would click on the dishes. Now you could get confused and also click on bread and butter. Why

not? I am highlighting which dishes have bread and butter. Why not highlight the term bread and butter to show the answer?

E: This idea of clicking on the menu is tricky. It's a very unconventional way of answering questions. It's almost like they were limited by the choice of technology. They didn't want to ask people to type everything in. They wanted to make it easier to answer, or perhaps more importantly, easier to score. I think it makes it more open to misinterpretation. The technology brings another level of barrier to the ability of the test-takers to communicate their responses. It's not easy.

C: There's this frustrating thing going on. They say that these are real-life examples. They set you up in a way to think, 'I should be able to handle this.' And then they turn it around on you to do some really strange, unexpected and unusual things with the text that you would never, never see. At least when you go and do a multiple-choice test, you know it's artificial, you know it's a construction. You know what it is and what it isn't.

E: Also, in multiple-choice there is no misunderstanding about *how* to indicate the answer—you make a choice. Whereas here, there could be a lot of misunderstanding between your ability to interpret what they want you to click on and their previously established decision of what they want you to click on. There could be a real incoherence between those two things. But in a multiple-choice test, it's clear *how* you indicate the answer. Also, multiple-choice is so commonly used in college and workplace tests. For example, students taking PSW [Personal Support Worker] training must pass the [national certification] exam at the end of the course. It is a 200-question multiple-choice, timed, on-line exam.

I think the results of this test would be very skewed. I wouldn't have confidence in this. Would you?

A person's ability to do the test does not reflect what they would normally do when reading a menu, particularly since a menu would not be assembled the way it is in the spin-off test. What they have to do to respond to the test questions is recognize that the test operates differently than their experience acquired reading menus, and then draw on a repertoire of test-taking strategies and knowledge under pressure. In essence, test-takers must make a substantial model of mind shift, from real-world problem solving to test-taking problem-solving. If they rely primarily on real-world problem-solving abilities because they have not had extensive experience in a formal education setting, like adults who attend literacy programs, they may not be able to make this shift.

The tests are disconnected from day-to-day thought, action and 'processing' that would be called upon to respond to similar texts. They are also different from other types of testing that a learner may have encountered, such as a multiple-choice test. In order to get the correct answer, test-takers must go through a process in which they trouble-shoot a faulty text that intentionally attempts to trip them up. They need to draw on a repertoire of test-taking strategies and experience. They must be confident enough in their understandings of the technical operations of texts to rely only on their decoding knowledge, knowledge of grammatical structures and knowledge of organisational formats, rather than experiential knowledge and meaning-making abilities. Then, they have to be adept enough with a computer to record their answer.

Overall, when considering their use in education settings, there are two fundamental problems that make them unfair: 1) they have no validity in education settings; and 2) they are deceptive. The tests were not designed to measure what is taught in education programs (not just adult literacy but education in general). They do not align with the

curriculum nor do they align with how literacy is taught and developed. They were intentionally designed not to measure linguistic skills and knowledge. They are also deceptive. They are promoted as being an 'authentic' measure of 'real-world' literacy use. The test-taker enters into the testing situation with certain expectations of how the test should operate, but, as my colleague and I experienced, is continuously surprised, confounded and ultimately frustrated to discover that the test is operating differently. Further, there is no way to account for this difference. The conventions are unfamiliar, unlike familiar testing formats like multiple-choice, and must be figured out while in the testing situation. Only those with extensive test-taking expertise and resilience could get through the test.

A national project developer who was involved in promoting the use of a spin-off assessment for individuals and programs recognized the challenges for adult education. During an interview she emphatically stated the following:

The IALS framework was developed for measuring literacy in populations. For individual assessment, it's a crappy framework. It's not meaningful to say to someone that you can perform one or two matches with highly distracting information. IALS is important information to have, but it is limited. It provides a comparable score, but does not tell you how to help individuals. I have difficulty with IALS.

It is completely understandable why most people who took the IALS tests, who may have scored at Levels 1 and 2, would not see a connection between a low score on the test and their actual skill use in a similar situation.¹³ There is no connection. What people do on the test is completely different from what they do in life with a similar text. When test-takers stated that they do not encounter literacy challenges, despite what their IALS scores indicated, they are not simply saying that they are in unchallenging situations. They are also saying they are not in situations that require them to trouble-shoot faulty texts under pressure, and then apply their knowledge of testing conventions.

TOWES: A Barrier to Developing Workplace Partnerships

As a condition of accepting both federal and provincial project funding to develop courses and related curricula, programs had to use a recognized spin-off test (i.e. PDQ or TOWES) to demonstrate project ‘effectiveness’. The tests were to be administered at the beginning and end of the project if workers or learners were involved. A program coordinator who received provincial project funding to establish a partnership between a literacy program and community employers described her experience with the TOWES. She explained, “They want us to use those very formalized tests. Really, we found, we didn't even know what TOWES was until we actually took it on.” Once they discovered what TOWES was, she said, they immediately recognized that it wouldn't be appropriate

13 Questions in the survey part of the ILT initiative asked respondents about their literacy uses and literacy demands. Most respondents, who were categorized into level 2, deemed to be below a ‘suitable minimum’ said they didn't encounter problems.

due to the amount of time it would take to implement. The coordinator also struggled with making a learning connection between TOWES and the content of a workplace course. “Now we realize what an onerous thing it is. So it's not really doable with the people, the employees.”

The coordinator explained what the provincial ministry envisioned, based on the proposal guidelines.

They want us to go to the employers and say we're going to provide training. First, we do a TOWES, which is the three-hour test. And then we figure out what they need, and then we probably spend six weeks training those employees on work time, and then we do the TOWES again, the three hour test, and see this progress, and that's it.

The program coordinator, who had over 20 years of experience working in adult literacy programs, including workplace learning, recognized the contradictions between the project design and the mandated use of the Essential Skills, and what actually made sense based on her experience and expertise.

They [employers] aren't going to give their employees that much time. You might get one hour a month during a staff meeting. Maybe you get one hour. Then certainly you're not going to spend hours doing TOWES or anything like that. What we have to begin [with], and what we should be doing, is providing the employers with things that they think they need first of all. We don't go in and say we're going to do this, this, and this.

In order to ensure that the project would be acceptable to employers, she renegotiated its terms with the ministry representative. She explained that she had to convince the representative that the project would need to be changed: “I think they're realizing this

may not work—TOWES, for everybody. So we're allowed to develop some of our own things.” She then worried that the project would not be considered a success without the testing component: “But I don't know if that looks bad.”

In this instance involving the use of a spin-off assessment, the test is being used only as an accountability tool for managerial purposes, to get some sort of measure of ‘effectiveness’. It was mandated for use as a condition of receiving project funding without any understanding of the impacts of this requirement. The conversation with the program coordinator reveals that the use of the test would be a barrier that could threaten the integrity of the partnership, and her attempts to build a collaborative relationship between the literacy program and employer partners. The test is time-consuming and highly intrusive. The coordinator recognized that its use could alienate the workers and be perceived by the employers as a waste of valuable time and resources. The coordinator had enough expertise and confidence to renegotiate the terms of the funding agreement, a move that many would likely find a challenge to make. Despite her expertise, she did however question how the project would be perceived without the testing component.

TOWES: Disconnected from Curricular Aims and Confusing Results

Another project developer described her use of the TOWES in a program designed to help women re-enter the workforce. She spoke to me after the program had taken place and reflected on the incongruence between the pedagogical aims and activities of the course and the mandated use of the TOWES. Similar to the experience described above, the project developer had to incorporate pre- and post-testing using TOWES as a condition of receiving federal funding. The test was used despite its disconnection from

the program content and instructional approach. Results of testing were mixed and confusing, explained the project developer.

For the most part, everybody's skills went up. A couple of people had high skills in the 3-400 level for reading so there would be no change. But for the women who were at the lower level, all their skills improved. In instances where people hadn't moved, the facilitator had a discussion with them about what that meant. Their skills were already really high. We said that this [program] wasn't set up to specifically increase your reading skills. So if you're not specifically teaching to the test, it's not a bad thing that your reading skills haven't gone up, they were already quite high. For a couple of the women, we were surprised, their scores actually dropped pre and post.

The program was designed to help women re-enter the workforce. It was not designed, as the curriculum developer mentioned to increase reading skills. In fact, much of the instructional approach was discussion-based. While the mandated use of the test may have fulfilled accountability requirements, it did not inform the course content or instructional approach. Students themselves may have been perplexed and not able to recognize the connection between their course and the test, as indicated by the need of the facilitator to have a discussion with some students about what the results meant.

Two additional instances of test use will be described in subsequent sections of the thesis. In Chapter 6, I examine what happens when the spin-off tests are integrated into Ontario's performance management framework for literacy programs in order to supply a measure that will be used to allocate program funding. In Chapter 7, I describe what happens when the level implications (used to assign socio-economic meanings to the ILT levels

and individuals) are incorporated into PDQ in an attempt to provide test-takers with an explanation of their test results.

Summary

An analysis of the test task development process reveals how the test is designed to operate, and how those operational principles and processes introduce some unique features. An analysis of the regulating frame reveals how IRT is used to develop measures that estimate the likelihood of correct responses in the population at various points of difficulty while controlling for guessing. The interest is in monitoring literacy as a resource that is distributed across populations. Individual performance does not produce scores, rather, test tasks produce scores and individuals are located in a model based on the likelihood that they can respond correctly without guessing. Producing test tasks that have measurable parameters of difficulty in accordance to highly complex scoring protocols is the focus of test development. The concern is not with producing test tasks that align with a stock of reading skills that people may or may not have. The locating information model guides the development of test tasks and more specifically, accompanying test questions. The model is distinct from testing models that continue to be used in the K-12 system, which rely primarily on reading comprehension.

The content or subject matter of the test tasks is not the main focus of test development. This means that contradictions, confusions, misinformation and even incorrect or harmful information are not of primary concern when assembling the information for the test tasks. This was demonstrated in the analysis of the medicine label. A test-taker's real-world sense-making abilities must be suspended. It also demonstrates that the test tasks developed for the ILT are not representative of 'authentic' texts and applications, despite

their promotion as such, but are highly manipulated and controlled products that contradict individual knowledge and common practices.

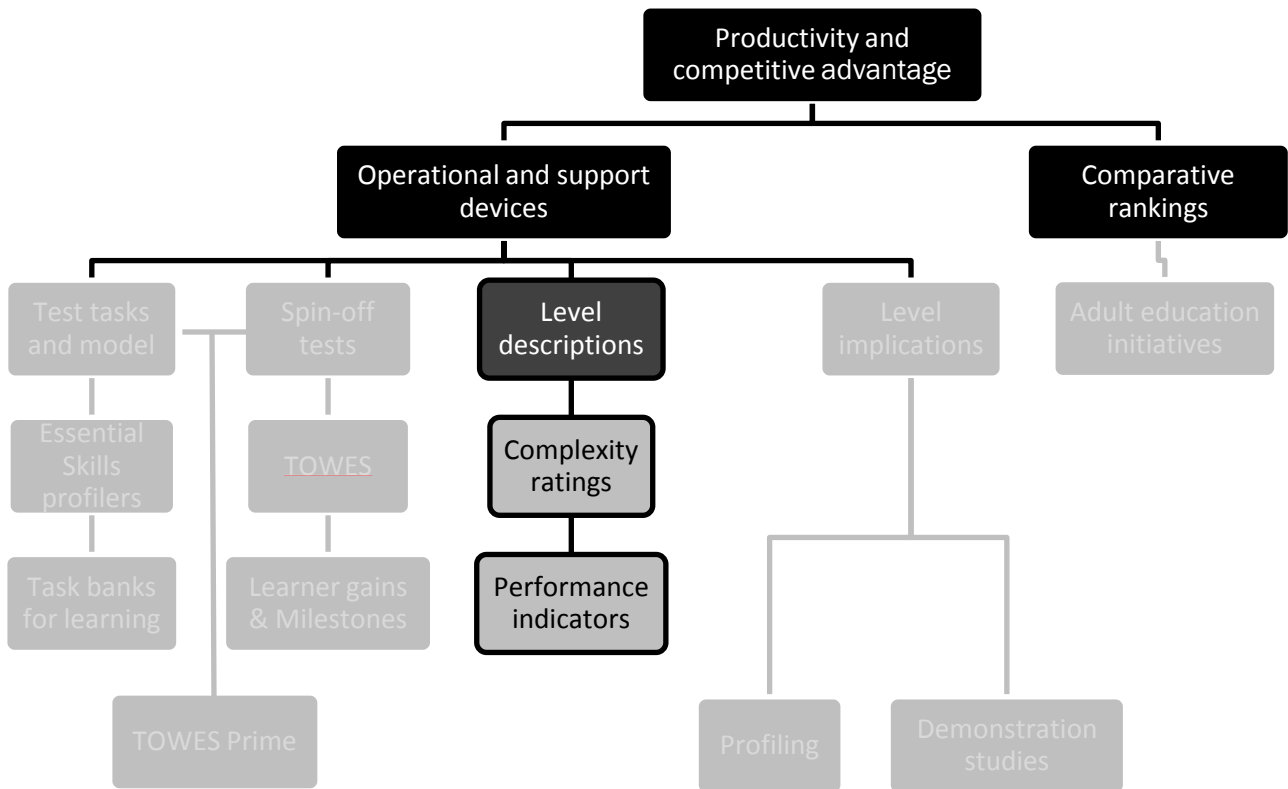
The test tasks have been the subject of critiques for their inability to represent ‘authentic’ literacy practices, their narrow focus on informational and instrumental content, their inability to represent complex problem-solving abilities, differential item functioning, and the way that they prevent test-takers from using real-world knowledge about topics and familiar texts.

Spin-off tests have been developed, with the assistance of ILT test developers and psychometricians, for program and individual use. The spin-off tests have three main aims: to allow individuals to measure themselves against the ILT standards, particularly those who may be ‘below standard’ so they can ‘fix’ their problems; to provide educators with instructional supports; and to provide policy-makers with an assessment tool that can be used to measure the outcomes of local education and training initiatives. Test-takers’ ability to do the test does not reflect what they would normally do when reading, but is related to their ability to draw on a repertoire of test-taking strategies and knowledge under pressure. The tests are abstracted from day-to-day thought, action and ‘processing’ that would be called upon to respond to similar texts, and they are also disconnected from traditional modes of testing that are focused on the acquisition of linguistic skills and/or other types of knowledge.

In two instances involving the use of a spin-off assessment, the test is being used only as an accountability tool for managerial purposes, mandated for use as a condition of receiving project funding. The conversation with the program coordinator reveals that the use of the test would be a barrier that could threaten the integrity of the partnership that

she is developing with employers. In another instance there is incongruence between the pedagogical aims and activities of the course and the mandated use of the TOWES. Learners were subjected to the test despite its disconnection from the program's curriculum.

5. Constructing and Using the Essential Skills



The incorporation of the ILT into curricula and accountability systems has been a uniquely Canadian project thus far. What has greatly facilitated the intersection of large-scale testing with curriculum and education policy development is the Essential Skills. Produced in the early 1990s by the federal government, the Essential Skills was designed as a competency-based framework of occupational standards for jobs that did not require an education credential. Similar to any competency-based framework it is comprised of domains, levels and a series of statements describing job activity across the domains and levels. The five levels in the Essential Skills were derived from the five levels used to describe test task complexity in the ILT, the level descriptions. In IE terms, the

intersection of the ILT and the regulatory procedures of competency-based curriculum development is an instance of intertextual coordination. The ILT level descriptions supply competency-based curriculum framework development processes with categories, assessment methods and a hierarchy of skill development. The Essential Skills then acts as an operational model for other curriculum development projects. Since 2006 federal funding for various literacy related projects and initiatives has focused exclusively on the enhancement and use of the Essential Skills. Curriculum developers with expertise in competency-based methods readily recognize the curricular operation of the Essential Skills and adapt aspects for various projects. Greatly enhancing expertise in using the Essential Skills are courses and workshops for educators. Funding is also used to promote the Essential Skills among educators and employers.

Educators get hooked into using all or parts of the Essential Skills, and in some cases they are mandated to use the Essential Skills in order to receive federal or provincial funding. The Essential Skills, similar to all competency-based frameworks, is a project designed to create and support the use of a common language for literacy and skill development. While the Essential Skills may supply the categories and indicators needed to fit into managerial frameworks that are used to manage and monitor programs and projects, they may not be capable of conveying meaningful information about skill development. Educators struggle to find ways to make parsed and abstracted statements of job activity meaningful and relevant for themselves, learners and even employers. They spend valuable time ‘translating’ the statements and re-writing them so they connect with actual program learning activity. When working with employer and educational partners, the statements become a barrier to partnership development and are again re-

written or not used, despite a mandate to do so. Learners and laid-off workers are made to fit their expertise and skills into the categories. Expertise and skills that don't fit are disregarded. As part of the Essential Skills project, educators are taught how to plan and deliver instruction that conforms to the same task analysis strategy used in the Essential Skills project. Carried into the Essential Skills from the ILT is the model of locating information, which has been reformulated as an instructional strategy. Educators express confusion and even frustration when attempting to use this instructional strategy, which disregard the experiences of the learner and the relevance of learning content in a learner's life.

Developing Competency Statements Using ILT Level Descriptions

How did statements describing test task difficulty in the ILT become statements used to describe job skill competency in the Essential Skills? What is the connection between variables that make cognitive processing difficult in the context of the ILT test tasks and job performance? First, it is useful to examine the development of the level descriptions in the context of the ILT. Using what was called an “interpretive scheme” by test developers (cf. Kirsch, 2001) test task scores were segregated into five levels in order to make the raw scores meaningful. Test developers describe how they noted “patterns of difficulty”, which, not surprisingly, corresponded to the scoring protocols. These patterns of difficulty were of course constructed by the test developers, and become the points at which the five levels are established.

Then, statements describing the “patterns of difficulty” at each level were devised. The statements are based on the five variables that make the tests tasks difficult: 1) the type of processing involved; 2) the type of information being requested; 3) the type of match or

connection between the question and correct answer; 4) the length and complexity of the text itself; and 5) the plausibility of distractors within the text (Kirsch, 2001). In the table below, an excerpt of the scoring protocols for prose tasks is compared to the descriptive statements, the level descriptions, devised for Level 1.

Table 3: ILT Scoring Protocols and Level Description for Level 1 Prose Test Tasks

Scoring Protocol	Level Description
If locate, add 1 If within paragraph, add 0 If 1 phrase to search on, add 0 If 1 item response, add 0 If match is literal or synonymous, add 0 If completion of new information frame requires no inference or the identification of a paradigmatic relationship, add 0	Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.

The level descriptions for the three domains (i.e. prose, document and quantitative) and five levels first appeared in their final form in the reports that followed the US based NALS assessment. (Refer to Appendix F for a complete set of the level descriptions used in the NALS, IALS and ALLSS.) The level descriptions have been reproduced in nearly every report related to the ILT.

The figure below provides an example of the level descriptions for Levels 1 and 2. These descriptive statements have become a fundamental textual coordinator in curriculum development and pedagogical work. **They are comprised of precise statements of observable activity across three domains and over five hierarchical levels that can be used as indicators of literacy development, operating in the same way as sets of learning objectives in a competency-based curriculum framework.** Supporting their use in a curricular context is a discursive shift. Each statement is written from the perspective of the test-taker rather than the operation of the test task: “Most of the tasks at

this level require the reader to...” The individual, not a primary concern during test development, is placed back into the operation of the test in order to make a connection between the results and their meaning for individuals. The discursive shift leads readers to assume that the test tasks produce measures of individual abilities, rather than describe the variables that make the test tasks difficult.

Table 4: ILT Level Descriptions for Levels 1 and 2

	Prose	Document	Quantitative
Level 1 (0–225)	Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Tasks in this level tend to require the reader either to locate a piece of information based on a literal match or to enter information from personal knowledge onto a document. Little, if any, distracting information is present.	Tasks in this level require readers to perform single, relatively simple arithmetic operations, such as addition. The numbers to be used are provided and the arithmetic operation to be performed is specified.
Level 2 (226–275)	Some tasks in this level require readers to locate a single piece of information in the text; however, several distractors or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the reader to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.	Some tasks in this level require the reader to match a single piece of information; however, several distractors may be present, or the match may require low-level inferences. Tasks in this level may also ask the reader to cycle through information in a document or to integrate information from various parts of a document.	Tasks in this level typically require readers to perform a single operation using numbers that are either stated in the task or easily located in the material. The operation to be performed may be stated in the question or easily determined from the format of the material (for example, an order form).

A Competency Framework for 'Entry-level' Work

A key concern of the federal policy-makers and managers of the Essential Skills project was the lack of established standards for jobs that did not require an education credential (cf. Mair, 1997; MacLeod, 2007). These are also referred to as 'entry-level' jobs. Without an education credential and education system that could be the focus of federal policy attention, how could quality standards be established for those jobs and, more importantly, the people in those jobs to manage and monitor their performance? There appeared to be some confusion however between the main developer of the Essential Skills framework and the policy-makers overseeing the project. The aim of the project, according to its main developer, was to establish "skill standards" that would then be correlated to ILT results in order to explore the relationship between literacy abilities, job performance and, by extension, greater economic growth (Jones, 1993, 2005). The aim was to develop the framework in order to support more empirical work. However, the manager of the project expressed concern with the absence of quality standards in 'entry-level' occupations that could then support educational work:

The Essential Skills Project focuses on lower skill occupations because these are less likely to be the object of standards development activities and more likely to be areas where skill deficit problems are experienced (Mair, 1997, p. 302).

Policy-makers in the federal government were also concerned with "productivity, safety and inclusion (for instance with regard to immigrants, Aboriginals, older workers, at-risk youth, etc.)" (MacLeod, 2007, p.62). The standards could be readily turned into learning objectives for education and training initiatives (ibid.).

The development of the Essential Skills framework can be traced by examining three technical reports written by the main developers (i.e. Jones, 1993a, 1993b; Jones & Déry, 1994). The developmental process described in the reports follows the regulatory procedures for constructing a competency-based curriculum:

1. Identify and assemble a source of expertise to develop the skill domains;
2. Devise an over-arching categorization system, ensuring that the categories are discrete enough to be observed for assessment and evaluation purposes;
3. Develop supporting categories if the main categories (e.g., reading) are broad, again adhering to the principle of observable activity for evaluation and assessment; and
4. Arrange the categorizations into a hierarchy in order to indicate development or difficulty.

First, the developers describe the process used to **identify and assemble a source of expertise to develop the skill domains**. The main developer states that the first step in the process was “identifying and measuring basic skills in preparation for creating a framework for examining basic skills in entry level occupations” (Jones, 1993a, p. i). He also states that the determination of which skills have the desired effects on productivity “should require considerable research.” However, he explains, “[S]uch research is almost always lacking, being replaced by expert opinion” (Jones, 1993b, p. 2). He proceeds to explain the challenges in determining the nine skill domains.

In our first report we discussed a large number of proposed basic skills lists, noting that many of them were simple collections of diverse skills, often justified by a survey of what experts thought ought to constitute such a list. There was little empirical research that showed these skills at work on the shop floor or in the office. Nor was there any over-arching theory of skills that guided the inclusion or exclusion of a

particular skill or ability. It is not clear, for many, that there was even a consistent understanding of ‘skill’ in the make-up of the list (p. 1).

The list is developed based on “expert opinion”, supported by an examination of previously developed lists, including one developed in the 1970s in Canada. The lists appear in the first of the three reports.

The next step in the process is to **devise an over-arching categorization system, ensuring that the categories are discrete enough to be observed for assessment and evaluation purposes.** In order to address the problems identified in creating a list, developers describe their “methodology”, which is the century-old method of competency-based curriculum development. First, write developers, the skill must be measurable and transferable and “appropriate for ‘skill standards’ work” (Jones & Déry, 1994, p. 23). In addition, the skills “must be basic in that they support and enable other skills” (p. 2). However, the Essential Skills then departs slightly but importantly from competency-based projects. Rather than focusing on individual “skill standards” and the ways that people may use the skills, the focus is on job activity. “We have tried throughout to state the skills in a way that reflects whether the job requires the skill, not whether an individual possesses the skill” (p.23, originally written in red for emphasis). However, this shift in focus is subsumed by a curriculum development process and “methodology” designed to measure and manage individual skill development. The nine skill domains are as follows: reading text, document use, numeracy, writing, oral communication, computer use, thinking, working with others, problem solving, and continuous learning. The first four domains (reading text, document use, numeracy, and writing) are referred to as the “literacy skills”; the remaining five domains are the

“essential skills”. Over time, federal policy-makers have encouraged the use of the Essential Skills for all kinds of individual skill development, and not only those skills related to employment. They are currently promoted as the “foundation skills” that all individuals need for “work, learning and life” (Employment and Social Development Canada, 2013). The term Literacy and Essential Skills or LES is now commonly used by adult literacy policy-makers, advocates, curriculum developers and some program staff.

It is at this point that the ILT is incorporated into the Essential Skills. To ensure that the skills are measurable for assessment and evaluation purposes, the level descriptions are used. In addition, explained a federal policy-maker, the integration of the level descriptions into the Essential Skills is seen to be the means to make a ‘rigorous’ connection between the framework and international standards. A federal policy-maker explained: “The relationship between it [the ILT] and the framework [the Essential Skills] is that it immediately leant our framework credibility because we had scales, population measures for at least some of them.”

Within the Essential Skills, they are called complexity ratings. They are used with some modifications for the Essential Skills domains of reading text, document use and numeracy, which align with the ILT domains of prose, document and quantitative. They are also reformulated to create a writing domain. Within the Essential Skills, reading text, document use, writing and numeracy are referred to as the literacy skills. The table below compares the ILT level descriptions and Essential Skills complexity ratings. To make the level descriptions work for the Essential Skills, a few adjustments are made. First, references to testing are removed (i.e. “If plausible but incorrect information is present in the text, it tends not to be located near the correct information.”). Second, test-taking

processes are generalized (i.e. “locate a single piece of information which is identical to or synonymous with the information given in the question or directive” becomes “follow simple written directions”). However, in some instances the level descriptions remain intact (i.e. “read relatively short texts to locate a single piece of information”).

Table 5: Level Descriptions and Essential Skills Complexity Ratings

ILT Level Descriptions Level 1	Essential Skills Complexity Ratings Level 1
Prose Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Reading Text Read relatively short texts to locate a single piece of information. Follow simple written directions.
Document Tasks in this level tend to require the reader either to locate a piece of information based on a literal match or to enter information from personal knowledge onto a document. Little, if any, distracting information is present.	Document Use Minimal inference is required. Information found or entered in the document is a literal match (i.e., identical) to the information required. Information needed is immediate and obvious.
Quantitative Tasks in this level require readers to perform single, relatively simple arithmetic operations, such as addition. The numbers to be used are provided and the arithmetic operation to be performed is specified.	Numeracy Only the simplest operations are required and the operations to be used are clearly specified. Only one type of mathematical operation is used in a task.

The third step in the competency-based development process is to **develop supporting categories if the main categories (e.g., reading) are broad, again adhering to the principle of observable activity for evaluation and assessment.** Within the Essential Skills framework the “literacy skills” (i.e. reading text, document use, writing and numeracy) have sub-categories. The ILT level descriptions are extended and reformulated to support this work. Further, the writing domain, which was not included in the ILT, had to be developed. To do this, Essential Skills developers refer to the five ILT scoring

categories. Each of the Essential Skills' five writing characteristics shown in the table below (i.e. length, purpose, style, structure and content) corresponds to a scoring category. Only one of the categories, length of text, remains intact. Type of processing is extended to address reasons for writing and writing purposes. Type of information being requested is extended to address the audience for writing and style. Type of match is extended to address the adherence to writing formats and structure rather than adherence to a question answer match. Finally, the notion of familiarity is used to make a connection to the scoring category describing the plausibility of distractors.

Table 6: ILT Scoring Categories Compared to Writing Complexity Ratings

ILT Scoring Categories	Essential Skills Writing Statements
Length and complexity of text	Writing is less than a paragraph.
Type of processing	Writing is intended to organize, remind, or inform.
Type of information being requested	Informal writing for small familiar audiences—usually coworkers.
Type of match or connection between the question and correct answer	Writing which uses pre-set formats or writing for which the format is unimportant.
Plausibility of distractors	Concrete, day-to-day, matters of fairly immediate concern.

The fourth Essential Skills domain that is considered part of the literacy skills in the Essential Skills framework is numeracy. It was enhanced and modified substantially. In addition to the literacy skills (i.e. reading text, document use, numeracy and writing) the Essential Skills is comprised of five additional skill domains that are referred to as the essential skills (i.e. oral communication, computer use, working with others, thinking skills, and continuous learning). Complexity ratings for their development do not use the ILT level descriptions. Further, not all of the essential skills domains have complexity ratings.

The stretch that had to be made in order to develop the complexity ratings for writing and the re-working of numeracy mean that these two domains have very little connection to the “methodology” used to develop the reading text and document use domains. A federal policy-maker acknowledged that a stretch was made: “It was relatively straightforward to then impute correlations for some of the others. I don’t know if these were well done or not but it happened. It kept the field moving.”

The final step of the process involves **arranging the categorizations into a hierarchy in order to indicate development or difficulty**. The ILT provides the hierarchical system for the Essential Skills framework. The five ILT levels are used to define the five Essential Skills levels. The table below demonstrates the direct connection between the ILT level descriptions for prose test tasks and the Essential Skills complexity ratings for reading text at each of the five levels (Employment and Social Development Canada, 2013b).

Table 7: ILT Prose Level Descriptions and ES Reading Complexity Ratings

	ILT Prose Level Descriptions	ES Reading Text Complexity Ratings
Level 1 (0–225)	Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Read relatively short texts to locate a single piece of information. Follow simple written directions.
Level 2 (226–275)	Some tasks in this level require readers to locate a single piece of information in the text; however, several distractors or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the reader to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.	Read more complex texts to locate a single piece of information or read simpler texts to locate multiple pieces of information. Make low-level inferences.
Level 3 (276–325)	Tasks in this level tend to require readers to make literal or synonymous matches between the text and the information given in the task, or to make matches that require low-level inferences. Other tasks ask readers to integrate information from dense or lengthy text that contains no organizational aids such as headings. Readers may be asked to generate a response based on information that can be easily identified in the text. Distracting information is present, but is not located near the correct information.	Choose and integrate information from various sources or from several parts of a single text. Make low-level inferences from multiple sources. Identify relevant and irrelevant information.
Level 4 (326–375)	These tasks require readers to perform multiple-feature matches and to integrate or synthesize information from complex or lengthy passages. More complex inferences are needed to perform successfully. Conditional information is frequently present in tasks at this level and must be taken into consideration by the reader.	Integrate and synthesize information from multiple sources or from complex and lengthy texts. Make complex inferences and use general background knowledge. Evaluate quality of text.
Level 5 (376–500)	Some tasks in this level require the reader to search for information in dense text which contains a number of plausible distractors. Others ask readers to make high-level inferences or use specialized background knowledge. Some tasks ask readers to contrast complex information.	Interpret dense and complex texts. Make high-level inferences and use specialized knowledge.

A series of standards statements, twice removed from their original purpose (scoring protocols to ILT level descriptions to ES complexity ratings) become the standards used to describe work activity in over 300 ‘entry-level’ occupations. Within the context of the Essential Skills the complexity ratings operate as shells, a term borrowed from linguistics but used in an IE analysis to point out how words can be empty containers that need to be filled to become meaningful (Smith, 2005). They may be filled by the actualities and experiences of an individual or by an institutional discourse, such as the discourse associated with the Essential Skills. Tracing their development, as shown in the figure below, demonstrates that they have no connection to actual work activity. Their development clearly shows how they are merely a semantic interpretation. The ILT level descriptions are a simplified and spare version of the scoring protocols, and the Essential Skills complexity ratings are a simplification of the level descriptions. Once the complexity ratings are complete, the context of the ILT that gave the level descriptions some meaning and purpose has disappeared. Without context, on their own, statements such as “read relatively short texts” or “locate a single piece of information” are devoid of meaning.

Table 8: From Scoring Protocol to Level Description to Complexity Rating

Scoring Protocol	ILT Level Description	ES Complexity Rating
If locate, add 1 If within paragraph, add 0 If 1 phrase to search on, add 0 If 1 item response, add 0 If match is literal or synonymous, add 0 If completion of new information frame requires no inference or the identification of a paradigmatic relationship, add 0	Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Read relatively short texts to locate a single piece of information. Follow simple written directions.

The generic and decontextualized statements are put to use within the Essential Skills project to create over 300 occupational profiles. They are also put to use as sets of learning objectives within literacy and work training programs. Supporting their use in both contexts is a pedagogical process, a way of recognizing and formulating knowledge for teaching purposes, called an occupational task analysis. Before examining how the Essential Skills is used, as both a way to organize learning using sets of learning objectives and a way to teach, it is helpful to briefly highlight a completed IE examination (i.e. Jackson, 1988) of the occupational task analysis process.

The Development, Use and Learning Impacts of Occupational Task Analysis

An occupational task analysis is a direct descendent of the competency-based approach, and has become “the principle device through which ‘the requirements of industry’ are translated into curricular form” (Jackson, 1988, p. 132). The general inclination within competency-based curriculum development to view all learning as “the performance of activities” was refined in war-time training programs in the US. At the time, writes Jackson, traditional learning approaches were upended to ensure that knowledge was “stripped for action” involving only the “bare essentials” in order to ensure that all learning efforts were streamlined, focused and precise (ibid.).

Packaging the task analysis approach for vocational programs was a curriculum development process called DACUM (Designing a Curriculum), which was first used in Canada in the early 1970s. The aim was to provide “vocational education tailored specifically to meet the needs of educationally disadvantaged adults” (p. 137). Other curricular approaches were considered too cumbersome for teachers and curriculum

designers, and too complex for “educationally disadvantaged” learners. The solution was to devise a “two-day process for occupational analysis and an approach to educational design oriented to minimizing barriers to learning that can be seen as extraneous to occupational performance” (p. 138). The central operational feature of the approach is the development of a skill profile chart for a specific occupation. In a process called profiling a ‘qualified’ committee of employers work with an experienced DACUM coordinator in order to determine the ‘necessary’ skills of the job that need to be performed to be ‘successful’, and then develop a “universal description of the occupation”.

Analysis of a DACUM workshop reveals how differences between workplaces are “rendered invisible and irrelevant” (ibid.) by the occupational task analysis process.

Determining job requirements in accordance to the DACUM procedures compels workshop participants to look at work as an abstraction.

[W]ork tasks do not exist as such outside of a work process in which they arise and have their sense [...] Severed from their sense as ‘practical action’ and formulated instead as discrete phenomenon, job tasks acquire a peculiar, sterile, unfinished quality. In fact, this quality is an elusive source of dissatisfaction to both employers and educators involved in curriculum review process... (p. 154).

The processes identified in this brief overview of a previous analysis are carried into the Essential Skills project with some extensions and modifications. The Essential Skills carries on the tradition of occupational task analysis in the context of vocational learning and working with ‘disadvantaged’ adults.

Profiling Work and the Development of Task Analysis Expertise

The creation of the 300 occupational profiles is also referred to as profiling in the Essential Skills project. Profiling work extends and formalizes the process used in DACUM. Rather than have this work occur at the local level, as described in the DACUM process, groups of profilers, usually literacy educators, were trained to collect the information that would be used to produce the occupational profiles. What is referred to as the profiling methodology involves using the Essential Skills framework (and underpinning ILT level descriptions) to categorize various job activities and descriptions of work provided by employees. Armed with extensive questionnaires and forms, profilers enter workplaces, observe activity, interview employees, and collect documents. This is not an ethnographic endeavour intent on describing actual work practices and employee experiences, but a highly regulated and constrained process. The intent is to fit activity into the completed Essential Skills framework using the decontextualized and generic statements of complexity. Profilers would look for instances in which an employee reads short texts that require him or her to locate a piece of information, and then describe those texts in relation to the specifics of the occupation.

Each of the occupational profiles can be accessed online (cf. Human Resources and Skills Development Canada, n.d.) for teaching and learning purposes. As an example, statements about reading text in an occupational profile for day-care helpers are the following (the numbers refer to one of the five ILT levels):

Read notes from parents which may describe the medicine a child is taking or provide information, such as that a different parent is taking the child home. (1)

Read a communication log which includes information on the activities of the previous day, children's behaviour and children who are ill. (2)

Read stories to the children during story time. (2)

Read books and magazines to find activity ideas which are appropriate for the children's level of development. (2)

Read pamphlets from the Public Health Office about viruses in the area, so they can watch for symptoms and answer parents' questions. (2)

Read information on enrolment forms of new children, such as behavioural or medical information. (2)

Review manuals stating the philosophy and procedures of the day-care centre or school. (3)

Read ministry guidelines on provincial child-care policies, covering topics such as, operating a nursery or handling emergencies. This information may be used to answer parents' questions. (3) (Government of Canada, n.d.)

While there is a semblance of recognizable activity in the listing, its usefulness in a learning context may be limited, as I learned from a colleague who taught a workplace program for day-care helpers. When working as a program coordinator, one of my responsibilities was to look for curricula to support educators in the program. I sought out the occupational profile for day-care helpers to share with a colleague who was developing a workplace program for those who wanted to work as assistants in child-care settings. My colleague was developing an evaluation tool for the program, which also included a work placement and similar activities, I thought, as those described in the occupational profiles. She politely took the profile, glanced at it and told me that it may be of some use. I later saw it in her recycling bin.

To produce the evaluation tool she met with the child-care coordinator and site supervisors who oversaw the students while on placement. Together, they came up with

their own evaluation tool that had a direct connection to the practices and expectations of the setting. In addition, the expectations of the coordinators and supervisor were negotiated and often modified by the educator to accommodate the experiences and learning trajectory of students. The result was a listing of practices that were directly connected to the day-to-day operation of the child-care, and the students' roles and activities while on their work placement. It was meaningful, relevant and useful for all those involved. More importantly, it was constructed through collaboration and negotiation from three different perspectives. Before the tool was put to use, students contributed to a review, and modifications were made. The tool then continued to be reviewed and modified to accommodate changes in the workplace.

There are several reasons why the occupational profile was not useful, even in a limited way, to support the development of an evaluation tool. First, activities were listed that simply were not part of the expectations of a childcare assistant in that specific workplace. Further, the levels that accompanied each statement had no meaning, and the levelling system was not recognized by the educator, the learners and employer. The main issue, however, was the way that activity had to be parsed and rearranged to fit the discrete Essential Skills domains. For example, students actually did read stories during "story time". However, the reading was part of a broader set of inter-related activities which had to be accomplished. During what was called circle time, the daycare assistant organized and led a set of activities, often following the theme of the story, which could include songs and games. The reading of the story was highly interactive and involved questions and discussion with the children. Focusing only on one aspect of the learning

circle activity that the story was a part of meant the statement no longer had meaning and relevance to the educator, learners and employer.

Extending the Occupational Task Analysis Process

Literacy educators can learn the occupational task analysis method in a week-long course. Initially, the course was developed to train people to produce the occupational profiles in the Essential Skills project. As profiling work was nearing completion, the course was re-worked and opened up to “workplace educators, adult educators, curriculum developers, and project managers” who would like to develop their “Essential Skills expertise” (SkillPlan, n.d.). In an additional course, educators can also learn to develop “workplace materials” that “connect transferable Reading, Document Use, and Numeracy skills to workplace applications” (ibid.). In the course, educators learn basic ILT test task development principles and processes to develop their own “worker-focused task questions” and “answer steps that model a transferable learning strategy” (ibid.). The task question and answer processes mimic the locating information model of the ILT. Douglas College in British Columbia has recently introduced an adult educator certification program to support the work of human resources professionals, employment counselors and adult literacy educators by teaching them how to “integrate an Essential Skills approach” (Inside Douglas, February 2012, n.p.). Participants learn the basic ILT test task development principles and processes along with an occupational task analysis in what is called the Essential Skills methodology, in addition to the use of ILT spin-off assessments.

Trained profilers (and now Essential Skills practitioners with certification from Douglas College) have become new literacy ‘experts’ and receive project funding to create

curricular materials that incorporate the occupational task analysis process and the test task development principles from the ILT. Federally and provincially funded initiatives have required the use of trained profilers when developing curricula. Their knowledge has been extended to develop informal assessments and instructional materials for program use. In addition, other projects such as the Ontario Skills Passport have focused on the development of rubrics, guides, and checklists incorporating the level descriptions for educators, and self-assessments for learners. The tools are designed to help learners ‘track’ their skill development in accordance to the level descriptions, and develop their own ‘work plans’ in order to acquire ‘missing’ skills (cf. Ontario Skills Passport, n.d.).

Essential Skills Critiques

The Essential Skills framework has become the operational discourse for the federal government’s adult learning and literacy policy directives and initiatives since 2006 when the Office of Literacy and Essential Skills (OLES) was created with a mandate to support the use and further development of the Essential Skills. To date, there has been no funding devoted to a thorough critique and review of the Essential Skills using broad understandings of literacy development, work-based learning and adult learning. A federal policy-maker explained the current interests of the federal government and the

way that literacy, once conceptualized and actualized in a very broad way,¹⁴ is now defined by the Essential Skills.

Increasingly the federal government is taking a narrow role to view its primary interest as adult Canadians in the labour market context as where it has its biggest interest in having an influence. It's not to say that we don't understand or appreciate that there are social, and community and family dynamics at play, but there are probably other levers that are better placed to address those. What is of principal interest to the federal government is to ensure that Canadians have the skills that they need to succeed in the workplace. The Essential Skills framework in that sense seemed tailor made to fit that kind of policy direction. And we've seen that described in different ways being echoed in the policy statements of the last three or four governments at least.

As a Canadian project, the Essential Skills has not received the same amount of critical attention as the ILT. Nonetheless, the criticisms that have been made are compelling. They address the construction and meaning of the skill lists; the faulty presumption that the skills are transferable, meaningful and useful to employees and employers; and the use of the Essential Skills for individual skill development.

The Essential Skills framework, writes one researcher, is premised on a deficit model that assumes deficiencies have to be met by interventions. It does not assess the inherent

14 Until 2006, adult literacy projects at the federal level were overseen by the National Literacy Secretariat, which had a “community development” and “partnership” mandate (Hayes, 2009). Projects were broad in scope, addressing community, health, social, socio-economic and family connections with literacy, in addition to work related connections.

abilities of workers. It operates as an observation of deficiencies, rather than an assessment of abilities (Pankhurst, 2005).

The construction of the skills list is confusing and without purpose; it results in a “mixed parentage” list (ibid.). It is a “skills menu” that variously includes core skills, generic skills, essential skills, and employability skills (Jackson, 2005b). “This growing notion of core or generic skills as the route to a flexible workforce has attracted often vitriolic criticism for failing to understand the nature of either work or learning” (p. 15). The Essential Skills repeats the errors of previous skill lists and frameworks by having a narrow focus on literacy as propositional knowledge (Pankhurst, 2005). It “reduces to banality our understanding of how adults think, learn and use what they know” (p. 32). The concept of generic or essential skill is meaningless in the workplace, explains Jackson (2005b). There is no such thing where skills are attached to particular people, processes, tools and situations. “[W]hen the organization of the work itself cannot be held constant, neither can the skills required” (p. 16). In addition, the notion that skills (essential or otherwise) will transfer¹⁵ is “deeply flawed.”

[W]e misunderstand how it [transfer] occurs. The capacity for such ‘transfer’ is not a ready-made property of particular skills, even of those we call generic. Rather, the process of transfer is an active achievement

15 A study of adult learners in an employment preparation program demonstrates how transfer occurs when adults find new learning meaningful and applicable to their various life roles, including their work as parents. In addition, transfer occurred when teachers, students and workplace supervisors worked actively together to support a culture of transfer (Taylor, Ayala, & Pinsent-Johnson, 2009).

of problem solving and interpretation on the part of an individual, also heavily influenced, the research shows, by what they call the climate or culture of transfer—which means the degree to which the new setting itself is hospitable to this work of problem-solving and application. But importantly, in every case, the skill to be transferred must be adjusted or reinvented by the learner to fit the specifics of each new circumstance (p. 18).

The singular focus on the individual and need for intervention conveniently ignores the “supply side” of the “supply-demand” employment dynamic (Pankhurst, 2005). Use of the Essential Skills with employers has actually alienated them, and prevents them from participating in workplace learning programs. It’s a challenge to get employer ‘buy in’, explains Jackson. Employers prefer customized programs and worry that their specific concerns will get lost in such a vague and generic government policy.

[A]fter nearly two decades of experience developing skills frameworks internationally, what seems to be emerging is an ever more elaborate training policy infrastructure, declining interest by the business community, and less and less actual training activity (Jackson, 2005, p. 16).

The Essential Skills may be useful to policy-makers because they are an abstraction from reality, able to connect to international conversations about skill, and support large-scale descriptions of populations (not individual people). This very abstraction is not so useful to educators who are working with actual people in specific work places: “the abstract categories (problem-solving, for example) which work well to make skills administrable as part of a policy process may not work very well in making everyday skills teachable, learnable, usable, and eventually transferable in real working environments” (Jackson,

2005, p. 18). It is crucial, concludes Jackson, to make a distinction between the use of the Essential Skills framework for skills assessment, compared to skills development.¹⁶

Getting Hooked into Using the Essential Skills

Since the inception of the Office of Literacy and Essential Skills (OLES) there has been a proliferation of learning materials, self-assessments, promotional videos, web-sites and posters, all encouraging the use and adaptation of the Essential Skills amongst teachers, learners and workers. Educators can readily access and likely regularly encounter materials through workshops and training opportunities. As the only source of federal funding for literacy initiatives, opportunities to do anything other than put the Essential Skills to use in curricular work have nearly¹⁷ disappeared.

The Essential Skills are promoted as being appropriate for adult learning, which is appealing to educators looking for different ways to connect with learners and workers.

Essential Skills provides us with an acceptable and easily accessible ‘product’ that names an ongoing challenge in clear, functional terms and underscores its relevance to the adult world of work and learning (Roger, 2005).

16 This was a distinction that was made by the original developers, but was not made by the policy-makers who oversaw the project. Further, the distinction was subsumed in a competency-based curriculum framework that is immediately recognizable as a learning developing device in the context of education.

17 There are two notable exceptions: 1) A social and holistic approach to numeracy (<http://www.socialnumeracy.ca/project.htm>); and 2) Changing education, a series of online tools that examines violence and learning (<http://www.learningandviolence.net/changing.htm>). Both of these projects were funded by OLES from 2009-2011.

In addition, promotional work is built on misinformation about the role of empirical research in understanding literacy development. The Essential Skills “methodology” (i.e. its use of the ILT level descriptions and occupational task analysis processes) are said to offer “fresh insights” into literacy.

The ESRP [Essential Skills Research Project] capitalized on these fresh insights into Essential Skills research and practice in Canada. From the genesis of the ESRP, a strategy of continuous improvement was embraced to integrate emerging information. Evolving understandings of concepts prompted the use of state-of-the-art terminology. Concepts and terminology that at one time held currency became stale, such as the concept of literacy itself (MacLeod, 2007).

Ultimately, noted one national literacy consultant dryly, “They go where the money is.” If governments are paying for the development of the Essential Skills, she explained, then that is what will get produced for program and individual use.

Further, the Essential Skills operates the same way as a curriculum framework. Aspects of the Essential Skills, like the skill domains and levels, are immediately recognizable and fit into educator work as skill lists, rubrics and checklists. In IE terms, these curricular devices operate the same way as interrogatory devices. Interrogatory devices (i.e. surveys, forms, sets of questions) and curricular devices (i.e. checklists, rubrics, self-assessments) are used to “transpose” people’s experiences and expertise into “institutional realities” (Smith, 2005, p. 226). Instances in which the Essential Skills are put to use in a variety of education initiatives demonstrate that their use can be confusing and time-consuming for educators, potentially detrimental for learners and a barrier to developing employer and educational partnerships.

A Common Language for Whom?

A primary aim of competency-based curriculum development is to establish the use of a common language for managerial purposes (Jackson, 1988). The Essential Skills is no different. A federal policy-maker said, “That sense of common language for skill sets was one of the explicit goals for the Essential Skills framework at its inception, and I think it still is.” A national consultant who also had experience as a policy-maker during the time that the Essential Skills was introduced emphasized the role of a common language in managing projects, “It gave them [policy-makers] the language and they could talk to people across the country. I was funding these activities. It was a way that everyone could talk to each other.” However, efforts to develop a common language are extended to the field; it is not simply the language of government. One of the goals of the federal government is to devise ways for educators, adult learners, workers and employers to use the Essential Skills language. A federal policy-maker explained,

You want people to adopt them because they make sense in their context so you get that sense of common language [...]
[...]But we recognize that these things take a really long time because we don't have the means to...I guess we don't have the means...We can't pass a law that says we have to describe things this way. For that, you're looking at more of a cultural change.

While the language may be common to policy-makers and those managing programs and initiatives, it does not work the same way on the ground. Educators’ efforts to “make sense” of the language are stymied at every turn. One project consultant said, “I think this Essential Skills stuff has really led to some confusion. The Essential Skills have really

thrown a wrench into things.” A recently hired curriculum developer without previous experience in adult literacy commented:

I'm new to this. The Essential Skills are not very well defined to be useful. If I were a teacher and saw this, I'd say that I'm not quite sure what to teach. I may have general directions, but I'm not sure how I can tell when I'm there, and whether I am headed in the right direction.

One educator explained what happened when using the Essential Skills with students:

They add another layer of vocabulary that becomes a barrier between us and them. It's another thing they don't know that we do know; it's condescending. With such limited resources, we really can't afford to waste time and money on re-thinking how we do things in Essential Skills language for no real purpose. People in the real world don't know anything about the Essential Skills. It's kind of this background thing that the government uses but no one else does.

The two educators who commented recognize what the Essential Skills are, and would likely be familiar with their presentation in a competency-based curriculum framework. However, they are not able to make use of the Essential Skills in their work. The one educator went further and pointed out how they are actually a barrier when it comes to working with students and employers. She also recognized how they may only serve “government uses” but not the uses of anyone else concerned with literacy and learning for adults.

Ineffective Use of Time and Resources to Make Sense of the Essential Skills

Educators also devote professional expertise and valuable time and resources to attempt to “make sense” of the Essential Skills, finding ways to make meaning of the nine skill domains, and figure out the use of the five levels.

The Essential Skills are often presented to educators as a list. They appear on posters and in learning materials. In order to make sense of this isolated list of words, educators attach their own meanings to each of the skill domains. The table below illustrates how a program put the nine Essential Skills to use make it better fit its focus on family literacy.

Table 9: Essential Skills Domains and Interpretations for Family Literacy

Reading	Read to your children
Document Use	Help children with homework
Numeracy	Figure out how much to pay for something
Writing	Help children with homework
Oral Communication	Resolve conflicts with family members
Working with Others	Develop good relationships with parents, children and siblings
Thinking Skills	Make decisions to benefit the family
Computer Use	Help children with homework
Continuous Learning	Learn a new skills with your kids or partner

However, attempts to make the nine skills meaningful falter. The family literacy examples are in the vein of the Essential Skills but are so constrained that they must be repeated. The statement “help children with homework” appears three times. Statements such as “read to your children” and “figure out how much to pay for something” fail to make the Essential Skills any more useful or understandable. Further, the statements about family learning are regulated and controlled by the listing of nine skills. What may have been initially meaningful in the context of a family literacy programs must be force-fit into the operation of the Essential Skills list.

Another strategy to make the list meaningful is to develop very detailed interpretations of the skill domains. For example, the following descriptions of reading text were used in a set of learning materials:

A forklift operator reads the manufacturer's label to determine the maximum load the forklift can carry.

A homeowner reads a notice from the municipality to determine how her family should prepare for a water hydrant flush (Essential Skills: Definitions and examples from work, learning and life, n.d.)

The attempt to infuse meaning into the Essential Skills falters again because the examples are so precise that they can be readily dismissed, if it is not something that a learner would actually do or experience. One curriculum developer said that her attempts to connect the Essential Skills to actual activity were "arbitrary" when developing a set of materials for a federally funded project.

The list of nine Essential Skills, arguably the element of the framework that is understood by educators (and not the levels or task analysis process), has to be appropriated and made meaningful. But these attempts fall short, using strategies that reproduce statements that are as vague and abstract as the original Essential Skills, or using strategies that result in descriptions that are too precise to be useful. Efforts made to insert meaning and relevance in a decontextualized listing of activity falter because the listing itself is too far removed, in its parsed and abstracted form, from descriptions of actual activity.

Efforts to figure out the Essential Skills are also directed at the levels. To do this work curriculum developers and educators try to find ways to make comparisons with other leveling systems, such as provincial literacy education levels, grade levels used in K-12 and the Canadian Language Benchmark levels for second language programs. The Essential Skills levels are even compared back to the ILT levels when it is not apparent to educators and curriculum developers that the ILT informs the Essential Skills. A provincial project developer said the comparative work "did the rounds." She explained

that educators made such comparisons using the level descriptions available in each system because “the terminology seemed similar enough to draw parallels.”

The following exchange between myself (C) and an educator (E) illustrates how one educator attempted to make sense of the various level systems in use. At the time, programs had to assign a provincial system level (LBS level) to each student. This process alone was challenging and contentious. To do this work, the educator chose to use a standardized assessment—the Canadian Adult Reading Assessment (CARA) (Campbell & Brokop, 2000). The assessment document contains a chart that relates CARA results with each provincial system, including Ontario’s LBS levels, in addition to grade levels. The educator uses grade levels because the volunteer tutors are not familiar with other levelling systems. Then, the provincial program representative who monitors her program told her to include the Essential Skills levels. To make this connection, she uses a chart she received in a training session. She explained the complex process.

E: So we evaluate the LBS levels using CARA and then we just put the LBS level and grade level together. Our placement students [volunteer tutors] don't come in knowing a lot about LBS. Except sometimes people [students] say, ‘What do you mean I'm only a Grade 4?’ It's [grade levels] a better way of understanding I think. It's a bit more concrete. Then we have the Essential Skills levels as they are set out in the Ontario Skills Passport.

C: Is this an assessment tool?

E: They have descriptors. It's not an assessment. I have it in an email somewhere where we also did...there's been a few things circulating where we translated LBS levels to Essential Skills levels. I think it was from training we did two years ago. Using those we say what their LBS level is.

C: Oh. I see. You do the CARA, and then you use this chart, the LBS Grade Equivalency Chart in the CARA book.

E: Right. Then using the CARA and the descriptors of the Essential Skills you can estimate their Essential Skill levels. We can't give all our clients TOWES. It's really just looking at the descriptors, getting to know the clients and what their skill levels are. For the reading, writing and numeracy, it's a little easier to get these into the Essential Skills.

She spends time finding ways to make alignments between three distinct levelling systems: K-12 grade levels, LBS levels and Essential Skills levels. The only level system that made some sense to the program's volunteer tutors and learners was a grade level. However, its meaning could be demeaning to the students. The other systems were not recognizable to students and tutors, but were mandated by the funder.

Barrier to Program Development and Employer Partnerships

Educators and program coordinators are put in the position of convincing employers to use an approach that is unfamiliar, bureaucratic and disconnected from their day to day concerns. A program coordinator explained that employers are usually unaware of the Essential Skills. As a condition of receiving funding to develop workplace programs and employer partnerships, programs had to use the Essential Skills to frame their educational work. A program coordinator explained what happened when she attempted to tell employers about the Essential Skills.

They don't know what they are. You're trying to explain it to them. They just call this sort of thing professional development, and then quickly identify what they need. They want things like managing aggressive and angry customers, and more effective communication

strategies for their employees in these situations. I have to get at the Essential Skills this way. They don't know what it means.

Another program coordinator explained that the focus of the program is not on the learners or employees, but on teaching the employers about the Essential Skills.

[Our] Essential Skills project is really about educating the employers. It would take a year to really build the relationship enough, and it takes a long while to educate an employer as to what skills...to get them to agree with us that these skills would be for their employees, and that they should give us some time to work on those skills with their employees, and to get some success.

The program coordinator works in a social support agency that offers a range of supports, including employment, to former inmates. The agency already had well-established connections to employers in the community. Attempting to renegotiate the partnership using the terms of the Essential Skills would be an imposition, particularly if it could take up to a year to “educate employers”. The coordinator added, “We *already* have a pretty good relationship in a certain way. They take our clients to employ them, but this piece is a piece they aren't used to yet.”

The initial attempt to develop the training partnership using the Essential Skills listing of skills to discuss training failed. The coordinator explained how they developed a needs assessment using the Essential Skills language.

[My colleague] put together a two pager and gave it to the employers, and not any of them gave it back. They said, we'll get to it, we'll get to it. We realized that wasn't a good way. We would actually have to sit down with them and do it. Then they said just give it to us and we'll look at it. So we gave it to them and they didn't look at it.

To make the partnership work, the program coordinator explained how she had to “reinterpret” the Essential Skills for the employer in order to make a connection with the employer’s stated training needs.

We will be developing Essential Skills training, but it will end up connecting to anger management, problem-solving processes, good communication with people from other cultures, and respecting diversity.

A survey conducted by a private research firm asked employers about their understanding of the Essential Skills. Employers, particularly those in Ontario, associated the term “essential skills” with the “minimum skill set” required by a job (EKOS Research Associates, 2007). In addition, they were not familiar with the notion that the Essential Skills framework is meant to be a comprehensive description of job skills at various complexity levels. Employers also do not recognize or acknowledge the transferability of “essential skills”, which is a key element of their definition and operation. Instead employers recognize “essential skills” as specific to particular jobs and employers.

Unable to Support Educational Connections

The following events demonstrate how the Essential Skills proved to be ineffective when an educator attempted to provide educational counselling to a recently laid-off employee. She was interviewing him to gather some background information in order to connect him to available training and educational opportunities in the community. One of the requirements of the session, funded by the province, was to complete a report using the Essential Skills categories. The educator (E) described to me (C) how a worker’s knowledge, expertise and skills were force-fit into the categories.

E: After they tell me the type of work skills, I give them a thing that has all the Essential Skills that they used in their everyday life, their work. I say, 'Tell me what a machinist does.' They say, 'Well I go in and I turn on the machine.' I ask, 'How do you turn on the machine?' And they tell me.

C: You just put the type of work skills here?

E: I use the Essential Skills though.

C: What do you mean?

E: The Essential Skills they would use. So if he said, 'I just turn on the machine.'

'How do you turn it on?'

'Well I flick the switch and then I look to see if it's calibrated.'

'Well what does that mean calibrated?'

'I look to see if when I measure it's the exact same as what the computer is telling me.'

'Oh,' I say. 'Then you are using some math skills because you have to recognize that the numbers are the same.' So I talk them through all the things that they would do.

C: So you take his....

E: ...the tasks that he does and I figure out what Essential Skills he would use. The reason I do that is that I want to show him how to use the OSP [Ontario Skills Passport site] so that he can do some career planning.

C: So then the Essential Skills would get written down here, under type of work skills. So you don't talk about the calibration of machines, or reading the gauges.

E: No. What I do at the end of the day is write a report that says where I suggest he go next. So I give him a referral right then and there, and then I will mail him something which will be a more anecdotal written thing, a sort of checklist thing.

C: How would you capture things like, say they had to do some supervisory things or have a leadership role?

E: Management skills aren't really captured in the Essential Skills. So I put down teamwork, which is Working with Others. Then I ask if they went on any courses as a manager. Then I say Continuous Learning. I put that right in there.

In this instance, the actual skills and expertise of the individual worker are only of interest until an alignment can be made with an Essential Skills category. The educator asks questions and listens for a response that can be reformulated to align with an Essential Skills category. After listening to the description of calibration, the educator focuses on one statement in order to make the alignment with math skills: “ ‘Oh,’ I say. ‘Then you are using some math skills because you have to recognize that the numbers are the same.’ ” She discounts the complexities and details of the work to make the alignment. Then, once the alignment is made, she reformulates his work expertise, using the description of math skills in the Essential Skills: “So I talk them through all the things that they would do.” The individual’s experience calibrating machinery is reduced to “recognizing numbers”, and then further subsumed using the generic descriptors in the Essential Skills. The process is not useful to the educator or laid-off worker. Its only stated purpose is to make a connection to a provincial web-site, the Ontario Skills Passport (OSP) that contains a series of self-assessments that can be used to identify “missing” Essential Skills and “track” progress in acquiring those skills.

After the form is completed, the educator explained that she would often pick up the phone and place a call to a coordinator of an educational program that the laid-off worker had expressed interest in. This was not a requirement or part of the official process. She

initiated the activity on her own, she explained, in order to provide what she called “some personal information”. She relied on her own experience working in the community and some information about courses and programs that she had collected because she thought it might be of interest to the laid-off employees. After doing the interviews for awhile she was able to make a personal connection for the laid-off workers she interviewed. She explained the process:

If they said I want to get into the welding program. I'd say, ‘Oh, that's [name of individual] at [name of college]. Here is the number. Ask for [name of individual].’ I'd ask, ‘Do you want me to call them right now? Let's find out who you need to talk to.’

The connection to a training program and sharing information about education and training is the fundamental aim of the process. The inclusion of the Essential Skills categorization process is a pedagogically unnecessary barrier. Although the educator follows the categorization process, which was mandated as part of the counselling activities, the only part of immediate value to the learner was done using her own knowledge and on her own initiative.

Locating Information Instructional Strategy

A series of workshops were developed using federal project funding to teach educators the locating information methodology (cf. Davidson, 2009). The workshops were designed by a trained profiler who had learned the task analysis method and principles of developing learning activities based on ILT test task principles. Participants in the workshop I attended were told that they would learn how to use “authentic materials in authentic ways” and learn “the transfer strategy” of the Essential Skills.

To begin the workshop, participants examined a series of documents including a procedure for shutting down an office each night, and a product information sheet for flooring materials. Participants first discussed the readability and presentation of text in documents, and appeared to find this useful. When one participant asked about the usefulness of discussing such specific texts with learners, she was told that that it didn't matter whether or not the educators or learners were familiar with the actual content of the document. The approach and activities they were learning in the workshop didn't require familiarity with a particular job, or an understanding of job-specific terminology and general knowledge. Participants were perplexed by this information. One asked, "Why bother teaching a learner something if it had nothing to do with their goals?" The sense of this approach lies in one of the regulating principles of test task development—to be concerned primarily with cognitive processing and not content or the meaning of printed information.

Participants were then taught how to formulate questions that conformed to the "transfer strategy", one of the purported aims of the workshop. The workshop developer may have been connecting to the notion that the Essential Skills are 'foundational', and once learned can easily transfer to other settings and workplaces. The method, I recognized later, was devised using an aspect of the scoring protocol. Educators were taught to formulate questions, and then rank them depending on whether they were designed to elicit concrete or abstract information.

During most of this discussion, participants said little but shared occasional questioning looks. They were then guided through a series of slides that explained how to teach learners a locating information strategy by searching for bits of information, cycling

through texts to find matching bits, integrating disparate bits, and generating new information.

Halfway through the two-hour session, participants became very agitated when told that they couldn't use the word *you* when constructing a scenario to be used to introduce a particular text. According to the slides, the learner is not to put him or herself in a situation to help understand the use of a particular document. They were told that too many assumptions would be made if the learner thought about how he or she would actually do a job, rather than what is deemed to be required to do the job, which would “bias” the process. Another slide stated that learners may not be interested in the scenario because they have no personal experience with the particular job being discussed so there was no point in personalizing the activity. After a short burst of conversation, in which participants attempted to understand and then dispute this rationale, they remained generally silent—most with their arms crossed. Perhaps sensing their frustration and lack of engagement, the workshop leader ended the session early. Afterwards, a colleague said to me that the workshop was a “complete waste of time” and she planned to toss all materials as soon as she returned to work.

The workshop was an attempt to ‘share’ some of the strategies and methods learned by certified Essential Skills profilers. These methods are direct descendants of the scoring protocols and test development principles devised for the ILT. The educators react strongly when informed that the learner and his or her concerns and interests should be removed from the teaching and learning interaction. The rationales—not to personalize the activity because it may not be connected to the learner anyway, and concerns about “bias”—upend fundamental pedagogical principles in adult learning.

Summary

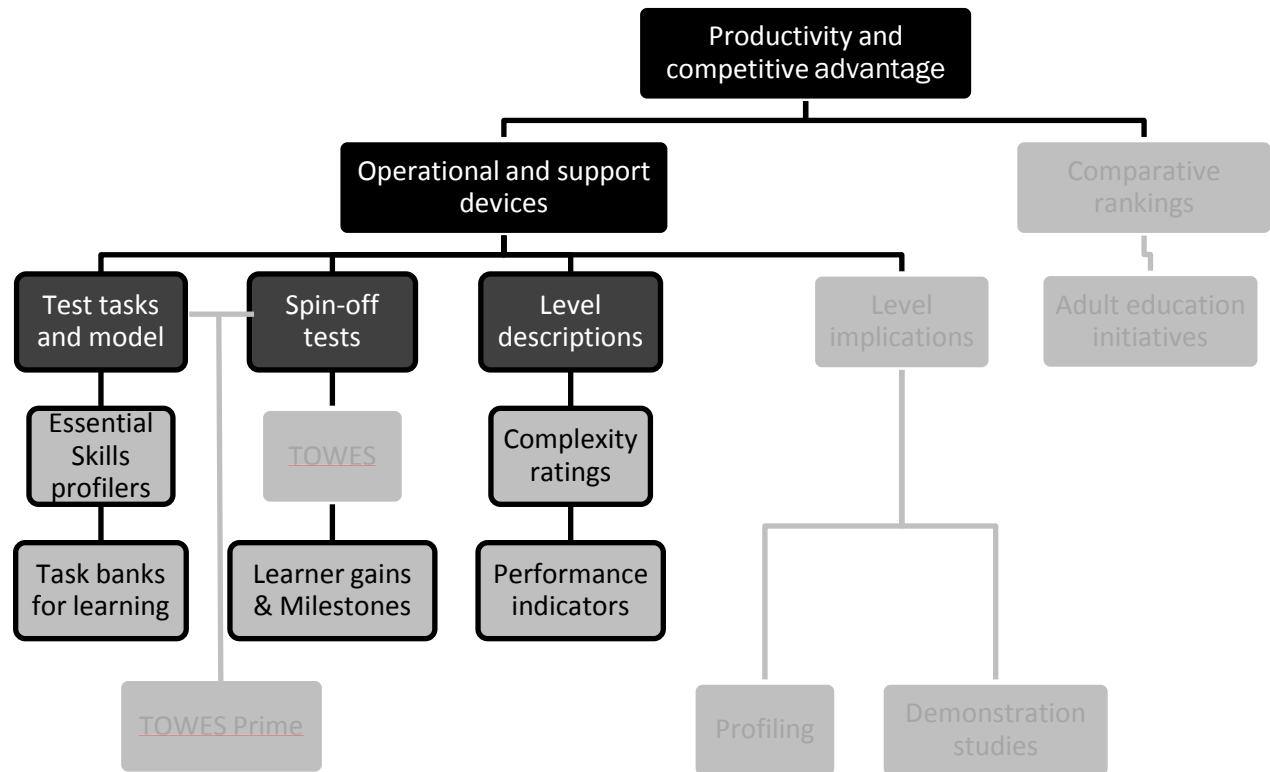
The variables that were used to determine test task difficulty in the ILT are transposed into the Essential Skills using the level descriptions. The level descriptions are comprised of precise statements of observable activity across three domains and over five hierarchical levels that can be used as indicators of literacy development, operating in the same way as sets of learning objectives in a competency-based curriculum framework. The ILT level descriptions supply competency-based curriculum framework development processes with categories, assessment methods and a developmental hierarchy. Tracing their development, demonstrates that they have no connection to actual work activity. The ILT level descriptions are a simplified and spare version of the scoring protocols, and the Essential Skills complexity ratings are a simplification of the level descriptions. Once the complexity ratings are complete, the context of the ILT that gave the level descriptions some meaning and purpose has disappeared. Supporting the use of the complexity ratings in education is a pedagogical process, a way of recognizing and formulating knowledge for teaching purposes, called an occupational task analysis. The task analysis is used to create over 300 occupational profiles in a process called profiling. An instance describing the use of an occupational profile demonstrates its limitations within and educational context, even to support an evaluation process. Literacy educators learn the occupational task analysis process and have become recognized literacy ‘experts’. Federally funded projects often require their expertise. The Essential Skills then acts as an operational model for other curriculum development projects, namely the OALCF, discussed in the next chapter. Curriculum developers with expertise in competency-based methods readily recognize the curricular operation of the Essential Skills and adapt aspects for projects

funded by the federal government. Courses for educators, who create various learning materials and assessments for program use, enhance curriculum development expertise that uses the intertextual processes.

The Essential Skills framework has become the operational discourse for the federal government's adult learning and literacy policy directives and initiatives, despite critiques. Critical analyses address the construction and meaning of the skill lists; the faulty presumption that the skills are transferable, meaningful and useful to employees and employers; and the use of the Essential Skills for individual skill development.

Educators get hooked into using the Essential Skills as they are widely promoted and supported with federal funding. Their use in Ontario was also mandated. While the Essential Skills may provide a common language for policy-makers and those managing programs, they prove to be uncommon for educators and learners. Educators struggle to find meaning in the abstracted skill list and related complexity statements. They employ different strategies to make the skills list and levels meaningful and relevant to their work, and devote valuable time to this effort. The Essential Skills language is also a barrier to developing program partnerships with employers, who are not familiar with the Essential Skills and prefer to discuss the development of customized training without using the generic skill list. When the Essential Skills list is used as an indicator of individual skill development in an assessment and educational planning process, it becomes a time-consuming impediment that provides little useful information to a laid-off worker. An attempt to 'share' some of the strategies and methods learned by certified Essential Skills profilers with educators is quite perverse, as educators are taught a pedagogical approach that removes the learner from the teaching and learning dynamic.

6. Developing and Implementing the Ontario Adult Literacy Curriculum Framework



The ILT level descriptions in combination with the Essential Skills domains and occupational task analysis process are used as the basis for the Ontario Adult Literacy Curriculum Framework (OALCF). Instructional, assessment and accountability components derived from the ILT and Essential Skills are used to manage and monitor adult literacy programs. Ontario is the first and only jurisdiction with an adult literacy education system to have used a test development constructs and accompanying model of locating information to construct a curriculum framework. The attempt to extrapolate the locating information model into a developmental framework for literacy learning is rife with confusions and contradictions.

An assemblage of OALCF texts and assessment devices, regulated by the ILT level descriptions and test task construction methods, are integrated into the performance management framework, which is used to judge program outcomes and allocate funding. A key operational aspect of the management framework is a complex assessment scheme, involving four distinct approaches to assessment. Aligned with the management framework is a provincial database system that integrates OALCF texts for reporting purposes. The integration means that the documentation of student learning and program activity must be organized using the OALCF texts. Together, the texts and assessments coordinate the learning of the ILT locating information literacy and an accompanying literacy task analysis pedagogy, a literacy and approach to teaching that exists only in the workings of the new curricular-managerial system. Literacy learning content and accompanying thought processes and interactions are put together to ensure that learning is made apparent, measurable and manageable for reporting and accountability purposes.

Development of the OALCF

Ontario's curriculum reform was initiated in 2009 in response to broader ministerial and departmental changes brought on by the signing of a federal-provincial labour market agreement. In addition, and more compelling for provincial policy-makers involved in adult literacy education, a recent provincial audit criticized the current methods being used to measure program outcomes and allocate funding. An infusion of federal money from the labour market agreement (\$2,000,000 for the curriculum project) and a directive from the minister to produce a curriculum was the impetus to initiate the OALCF project. Before 2009, attempts had been made to figure out ways to integrate the Essential Skills (and accompanying ILT constructs) into the provincial system. According to a provincial

consultant, ministry staff responsible for the LBS program began exploring the use of the Essential Skills in 2004-2005. Then, in 2006-2007 the Learner Skill Attainment (LSA) project was designed to look specifically at the use of the Essential Skills. The LSA, similar to many adult literacy initiatives of the ministry, relied on a group of field-based consultants to carry out its work. Some of these consultants were also trained as Essential Skills profilers. One sub-project involved an exploration of the use of two spin-off assessments: PDQ and TOWES. The spin-offs were 'field tested' with learners in programs to determine the usability. A provincial consultant who worked on the project said there were problems with both tests when used with learners in school board programs, most of whom wanted to access the secondary system. The content of TOWES was very specific to employment and didn't address academic learning. The level and abilities needed to complete the test were not aligned with abilities of learners. The test was also too time-consuming. While PDQ was "a little easier" she explained, the content was American and the on-line test introduced technical challenges (i.e. how to indicate an answer and navigating through the test) interfered with the student's ability to make a correct response. Neither test was chosen as an accountability measure. Other sub-projects looked at how various aspects of the Essential Skills (i.e. developing tests and activities that incorporated the locating information process and creating rubrics using Essential Skills complexity ratings) that could be put to use for program assessment and learning (see Community Literacy Ontario, 2007; Continuing Education School Board Administrators, 2009; Glass, Kallio, & Goforth, 2007).

In another sub-project, I was contracted thorough a school board support organization to write a paper that critiqued the Essential Skills framework. At the time, I was not able to

explicitly articulate all of the concerns I have now, but did state that the framework was inappropriate for individual literacy development work, and simply didn't contain anything useful or meaningful for educators to support them in doing this work. Even if I had been able to better articulate and demonstrate the problems, I'm not sure how useful that would have been. Provincial policy-makers were set on finding a way to use the Essential Skills and ILT. A consultant told me that at the beginning of the OALCF project the policy-makers had discussions with an ILT policy entrepreneur about the usefulness of the Essential Skills and ILT constructs in a provincial literacy curriculum.

Bow Valley had a contract all along from TCU. Scott Murray had gone to TCU and said it [a curriculum framework] has to be TOWES or IALS based. The only IALS-based thing that exists is TOWES. Bow Valley has been rolling that out all along.

Soon after, the provincial literacy department entered into a contractual agreement with Bow Valley College in Calgary, Alberta. Within that college is an entrepreneurial organization that has developed and implemented the TOWES across Canada. They are currently developing additional assessment and instructional products for the Canadian and international markets. The contract between Ontario's literacy department and the college was for the development of a standardized ILT spin-off test for use in the Ontario literacy system.

During the first year of project development, there were many disagreements about how to use the Essential Skills, explained one of the curriculum developers working on the project at that time. The policy-maker who was then the project lead travelled to Ottawa to meet with federal policy-makers who are responsible for the Essential Skills project. The provincial policy-maker received assurances that the Essential Skills framework was

indeed appropriate to support literacy development in all programs—not only those focused on work— and all students in those programs, including those with interrupted and incomplete education and multiple learning challenges.

Provincial policy-makers were already oriented to finding ways to use the Essential Skills and ILT. A consultant explained that the key reasons for their interest are the ability of the mechanisms to supply data-driven evidence of learner progress, and to align with international standards for literacy. Then, persuasive arguments from a policy entrepreneur (without literacy development and education expertise), in combination with assurances from federal policy-makers (again, without literacy development and education expertise) convinced them they were on the right path. The consultant explained the process:

Meanwhile they also made a commitment that they were going to do two things: that the curriculum was going to be based on the Essential Skills; and the ultimate assessment tool would be an IALS-based tool because they wanted to show progress. So if you look at the political part of it, the three things they wanted was a lock-step curriculum, an IALS-based assessment tool and the Essential Skills.

In order to produce a curriculum framework based on the Essential Skills, and an assessment tool derived from the ILT, a distinct expertise was needed. The majority of curriculum developers hired to work on the project, including myself, didn't have this

expertise. Although most curriculum developers had worked in the field for 10, 20 and even 30 years, and some had been involved in previous curriculum development projects, their expertise was marginalized.¹⁸ This created a tremendous amount of tension and acrimony. A group of developers from various organizations left halfway through the two-year project. While working on the framework, representatives from the Francophone group felt so pressured to understand the Essential Skills that they arranged to have their educators and curriculum developers receive the same extensive training as Essential Skills profilers. Their previous expertise was not relevant in the OALCF project, and they anticipated the need for making substantial changes to current documentation, and the organization of program learning. Two members of the team of curriculum developers were certified Essential Skills profilers. They also had demonstrated their expertise by previously producing an assessment and instructional package using the ILT test task development principles and level descriptions. They became the primary developers of the OALCF.

The regulating processes of competency-based curriculum development were then followed. The two main developers worked with a third member of the team to establish the categories that would be used in the framework. They first collected an assortment of learning statements supplied by programs. Then, they grouped these statements into

¹⁸ What were considered ‘supporting projects’ were completed by the curriculum developers without Essential Skills expertise. They included a listing of resources, a listing of assessments (my project), descriptions of task-based learning, and a description of the five goal pathways used to organize programs.

broad categories related to reading, writing, speaking, listening, numeracy and general learning. The process was explained to me in a way that implied the final categories and sub-categories called competencies and task groups ‘materialized’ from the collection of learning statements, and were very much a reflection of program activity. However, it is apparent that those competencies are directly aligned with Essential Skills domains and sub-domains. The table below illustrates the alignment. Dark arrows indicate a direct alignment between the Essential Skills domains and sub-domains and the OALCF competencies and task groups. Outlined arrows indicate where new task groups or aspects of a task group were created for the OALCF.

Table 10: ES Domains, Sub-Domains and OALCF Competencies, Task Groups

ES Domains and Sub-domains	OALCF Competencies and Task Groups
Reading Text	➔ Find and use information
Document Use	➔ Read continuous text
Document complexity	➔ Interpret documents
Complexity of finding/entering information	⇨ Extract information from films, broadcasts and presentations
Complexity of information use	
Numeracy	➔ Understand and use numbers
Money math	➔ Manage money
Scheduling or Budgeting and Accounting Math	➔ Manage time
Measurement and Calculation Math	➔ Use measures
Data Analysis Math	➔ Manage data
Writing	Communicate ideas and information
Length and purpose	➔ Write continuous text
Style and structure	➔ Interact with others
Content	➔ Complete and ⇨ create documents
Oral communication	⇨ Express oneself creatively
Computer use	➔ Use digital technology
Continuous learning	➔ Manage learning
Working with others	➔ Engage with others
Thinking skills	n/a
Problem Solving	
Decision Making	
Critical Thinking	
Job Task Planning and Organization	
Significant Use of Memory	
Finding Information	

The curriculum developers produced the components of the project that are the basis for measuring outcomes in the performance management framework: 1) the curriculum framework, comprised of six competencies and task groups across three levels; and 2) a set of assessments called milestones designed to measure learner ‘progress’. Overall, including the support documents produced by those who were not profilers, the curriculum development project generated hundreds of pages of documentation and information. At last count, 27 documents were posted on-line for educators and program managers (<http://www.tcu.gov.on.ca/eng/eopg/oalcf/tools-and-resources.html>). Despite such a vast quantity of information, a program coordinator said she was not able to find anything that could be used to support her work, aside from fulfilling mandatory accountability requirements. She explained, “I started to read and highlight important information. After reading most of the documents I had one paragraph highlighted. The stuff wasn’t written for the field.”

How ILT Texts and Task Analysis Play Out in the OALCF

The ILT model of locating information is carried into the development of the main competencies and task groups related to reading, restricting access to a range of textual formats and reading purposes. The ILT level descriptions—originally devised to provide a general description of test task difficulty and the complex scoring protocols—are used as individual literacy development indicators, carrying little useful information for educators. The general principles of ILT test task development, in coordination with the level descriptions, are used to create a series of assessments to measure learner ‘progress’, which will eventually be used to make decisions about program funding. The

approach to developing the test questions is modified somewhat but several principles of ILT test task development are carried through to the development of the Milestones.

Similar to spin-off assessments and the ILT itself, they are promoted as more ‘authentic’ assessments that are able to reflect actual literacy uses and practices. However, they prove to be instrumental and restrictive. Further, the assessments emulate the ILT process of removing place names, logos and references to commonly known individuals. The content, similar to ILT texts, addresses employment related topics and is focused on receiving and manipulating bits of information. A literacy task analysis strategy is taught to educators so they can reformulate learning so that it adheres to a formulaic set of observations that align with the curriculum framework. Educators in school board programs must reconcile the operation of the locating information model with the reading comprehension model of testing and curricular work in the K-12 education system. Their fundamentally different operation can be seen in a comparison of the main OALCF assessment and the Ontario Secondary School Literacy Test used in Ontario’s K-12 system. Recognizing a threat to the integrity of their pre-established connection to the secondary system, curriculum developers from college upgrading programs rallied to ensure that the managerial aspects of the OALCF are reformulated to align with their distinctive curricular system. This results in a series of assessment, curricular and accountability inequities that become entrenched in the ministry’s performance management framework (PMF) that is used to monitor programs and allocate funding. Programs located in school boards, with a less formalized connection to the secondary system, are not afforded the same privilege, and must do extra work to maintain partnerships with the secondary system. Learners will have to acquire a distinct set of

abilities in order to complete the mandated assessments. Those abilities are different than abilities that they need for academic purposes and abilities needed for accomplishing everyday literacy practices in their lives, whether at work or in the community.

Acquiring an additional set of skills to fulfill accountability requirements could be onerous for those learners with interrupted and restricted access to education as children and teens.

Locating Information Skill Domains Restrict Reading

The ILT focus on informational texts is used to regulate the main OALCF competencies and task groups, directing what is deemed to be beneficial and important literacy learning in the OALCF. This is most apparent in the in the competency “find and use information” which combines elements from the ILT prose and document level descriptions and the ES reading text and document use complexity levels. According to its description, this competency is comprised of tasks “that involve the different ways learners find and use information in the world” (Ontario Ministry of Training Colleges and Universities, 2011b, p. 13). All texts are reduced to information, and all purposes for reading are focused on information manipulation: “Learners need to be able to find, select, and evaluate sources of information as well as read and interpret individual sources of information” (ibid.). Examples of tasks that represent the completion of OALCF Level 1 include reading instructions on a cleaning product label, reading a brief email confirming the date and time of a meeting, reading a brief note from a co-worker, following directions to a local retail outlet, reading a brief blog entry on a familiar topic and reading a note in a log book. Use of creative and fictional texts is an afterthought, and is considered a task without a purpose beyond personal enjoyment. “Read continuous text

captures tasks that are completed to carry out a function, such as reading brochures to learn about community services, as well as tasks that are ends in themselves, such as reading poetry for pleasure” (ibid.). The table below presents an overview of the competencies and related task groups. (Refer to Appendix G for the complete framework.)

Table 11: Competencies and Task Groups in the OALCF

1. Find and use information			
Read continuous text	Interpret documents	Extract information from films, broadcasts and presentations	
2. Communicate ideas and information			
Interact with others	Write continuous text	Complete and create documents	Express oneself creatively
3. Understand and use numbers			
Manage money	Manage time	Use measures	Manage data
4. Use digital technology			
5. Manage learning			
6. Engage with others			

Not only does the OALCF disregard fiction and the use of fiction for opening up the world, and to connect with others and ourselves, but it also ignores the use of non-fiction texts that are commonly used in formal education settings, until Level 3. An example task at Level 3—read a chapter in a textbook to learn about a topic—is the first and only explicit reference to reading a text to acquire content and subject knowledge. Reading to acquire knowledge and reading to learn about the world are mere add-ons in the OALCF, subsumed by the emphasis on information. The overt focus on informational texts and disregard of a broad range of texts, particularly those needed for participation in secondary and post-secondary education, means that learners and educators cannot rely on the curriculum framework to prepare learners for further education, or, to support the

development of broad range of textual formats, reading purposes and uses of reading materials.

Interestingly, when a domain in the OALCF does not have an alignment with the ILT level descriptions, it operates in a different way, demonstrating how directive the ILT regulating texts are, and, also demonstrating how different the framework might have been without the Essential Skills and ILT. The OALCF competency “communicate ideas and information” is much more expansive and comprehensive than the reading-related competency. Writing was not included in the ILT and was reformulated in the Essential Skills. Without the direct guidance of the ILT, this category could be shaped in more expansive ways. The task group “express oneself creatively” is distinct from the Essential Skills and was created specifically for the OALCF. The sample tasks that are aligned with the category emphasize the use of a range of textual formats, and the development of personal and creative self-expression

Figuring Out the Competencies and Task Groups

The continual creation of new skill domains or competencies has impacts on learning and teaching work. The reformulation means extra work for programs and extra effort for learners without additional program support. Since 1997, five different frameworks, each with a different levelling system, different domain names and sub-domains, have been in use. With each framework incarnation, countless hours are devoted to accommodating the changes in programs: documents are modified, activities are re-created for learners, and valuable professional learning time is devoted to learning about the new categories. A literacy support organization coordinator with over 20 years of experience commented on

the continual changes to levels that she has witnessed in her career. She sees the most recent change as one more imposition that will need to be accommodated by programs.

There are all of these different areas that we are looking at in terms of establishing levels for people. There are five levels in the IALS for example, and it becomes very confusing for people. Each province and territory has its own set up with levels. If we are confused, imagine the poor learner! Back when LBS was first introduced to agencies, they started out with three levels. Well no sooner did programs get their materials developed and correlated to those three levels, then they decided to go to five and everything had to be redone. And now we're back to three. It means that sometimes you have to start using new terminology, and you have to twist yourself into a new shape of a pretzel in order to make use of it with the funder, and all the rest of it.

The changes become perplexing and meaningless for educators. One educator described what happened when the OALCF competencies began to replace the Essential Skills domains:

They changed the nine Essential Skills and bundled it into six, and I don't remember what they are. They are bundled into the six categories rather than the nine. I guess it's because you can't look at document use in isolation. It incorporates reading and writing. I guess. I don't know. I don't remember why they did that...

The OALCF categories, also intended to provide a 'common language' are not understood by anyone beyond the literacy system. One educator commented:

I don't see anybody talking in terms of competencies and task groups with post-secondary and secondary institutions, with employers, with the apprenticeship branch or job coordinators.

The re-categorization of learning will also impact learners. An educator described how she is strategizing with colleagues about how much learners will need to know about the OALCF. Ultimately, the decision will depend on whether or not the ministry mandates the use of the competency language, she explained. In the past, both the language of Essential Skills, and before that, the language of LBS outcomes, was mandated, not just in documentation but also in conversation. During program monitoring visits representatives from the ministry would ask learners about their learning, expecting the learners to respond using the terms of the frameworks. This was tracked on the program's monitoring report. The educator described her approach:

There will have to be discussions around this. We need to see how the monitoring form will be revised to decide whether or not to confuse our students with competencies and task groups, if there is no need to talk in terms of competencies and task groups. Our students who go into further education have to say, 'I got 75 per cent in math.' They don't need to say, 'I completed C.3.3' or 'I can use measures to make calculations.'

The 'common language' will also have to be learned by educators. "All of our practitioners need to learn new vocabulary," said one program coordinator, "before it can be common even amongst ourselves."

One educator described her on-going attempts to learn the OALCF language:

I guess it's just about familiarizing myself with everything, learning the language. I try to devote a part of everyday to going on to the website. I'm trying to because that is a teaching tool. Isn't that what it is designed for? I haven't even been on the EO [Employment Ontario] site. I've

been hearing the language for over a year now, and I have to keep going back.

Level Descriptions and the (Non)Operation of the Levels

The three levels in the OALCF were designed to relate directly to ILT/ES Levels 1-3. To make this connection, the OALCF contains a series of statements describing progress. These are lifted from the Essential Skills complexity ratings, which are derived from the ILT level descriptions. A statement in the OALCF documents explains the connection. The OALCF levels are “[i]nformed by the same factors that drive complexity at Essential Skills (ES) Levels 1, 2, and 3. The interplay of context familiarity, text complexity, and task requirements contributes to how challenging a task is. It is this interplay which is documented in the curriculum framework” (Ontario Ministry of Training Colleges and Universities, 2011b, p. 4). In the table below, a comparison of the ILT prose and document level descriptions, Essential Skills complexity ratings and OALCF progress indicators reveals the close, and in some cases, direct semantic matches.

Table 12: ILT, ES and OALCF Reading Development Indicators at Level 1

ILT Prose and Document	ES Reading Text and Document Use	OALCF Read Continuous Texts, Interpret Documents and Complete Documents
Locate a single piece of information Read relatively short texts Plausible but incorrect information is not near correct information Make a literal match Enter information from personal knowledge into a document Little distracting information	Read relatively short texts to locate a single piece of information Follow simple written directions Minimal inference is required Information found or entered in the document is a literal match (i.e., identical) to the information required Information needed is immediate and obvious	Read brief texts to locate specific details Makes a direct match between what is requested and what is entered Make straightforward entries to complete very simple documents

Contradictory and confusing information about the use of the OALCF levels is given to educators. First, they are told that the levels describe individual literacy proficiency: “The curriculum framework uses three levels to describe a learner’s developing proficiency” (ibid.). As literacy development and proficiency indicators, they are supposed to be used to categorize students into a level when entering a program. Then, educators expect them to operate in the same way as previous level systems and other educational systems (i.e. grade levels and Canadian Language Benchmarks). Once categorized into a level, learners would then have to demonstrate proficiency in order to move to the next level. I am not suggesting that this is appropriate or entirely useful in adult education, but it is how many programs use levels. However, their expectations and statements in documentation were contradicted during training sessions. Educators were told that learners won’t likely progress through the levels because they were intended to describe the difficulty of the tasks and not the skills acquired by a learner. Educators were perplexed. One asked, “What’s the point of the levels then?”

The desire to make an alignment with the ILT’s ‘international standards’ of literacy, has resulted in some perplexing interpretations of the ILT levels in comparison to OALCF levels. Since 2000 the provincial system used ILT levels to define its eligibility criteria. Programs could work with adults at ILT Levels 1 and 2. (How we were supposed to determine that was not elaborated.). The decision to include ILT Level 3 in the OALCF was likely made so provincial policy-makers would have a way to show that funding was helping adults move from Level 2 to 3. However, the actual make-up of students hadn’t changed. Further, educators and curriculum developers quickly recognized that the OALCF levels did not align with the ILT and ES levels. A curriculum developer from a

post-secondary program said OALCF Level 3 was “too low”. Students in the college upgrading program are working on a high school equivalency in order to enter a post-secondary program. The curriculum developer stated, “The OALCF does not go high enough. If the government thinks they have something related to IALS levels...they're out to lunch.”

While the levels don't go “high enough” for some, other educators are worried that the OALCF has no learning indicators to support students who are developing some initial practices and skills.

Everyone is also frustrated because if you look at the people that we teach, and you look at Essential Skills 1, it incorporates LBS 1 to 3.5. It's quite a wide range in Essential Skills Level 1 so it is really impossible to break it down into the needs of the learner.

Not seeing learning supports for some students, led one educator to question whether or not that meant learners who would need those supports would be “countable” in the new system.

Now we are part of Employment Ontario and there are going to be measurable outcomes based on goal attainment and task attainment. We can do it, but we have to position ourselves in a way that we are showing timely goal attainment. I am mostly concerned with the lower levels and specialized programs for adults with disabilities.

Level Descriptions and Test Task Model Used to Create Assessments

The general approach used in developing test tasks for the ILT are also used to construct informal assessments for program use, including one of the main assessment components in Ontario's new curriculum and reporting system, the milestones. The curriculum

developers who constructed the framework also developed the milestone assessments.

Guiding the development of the assessments is the curriculum framework. The progress indicators used in the framework, shown in the table below, are used to regulate the development of individual test tasks. For example, a test task at Level 1 related to the task group “read continuous text” would be constructed to ensure that the test-taker read only “brief texts” and the accompanying questions would require the test-taker to “locate specific details”.

Table 13: Complete Set of OALCF Reading and Writing Development Indicators

Competency	Task Group	Level 1	Level 2	Level 3
Find and use information	Read continuous text	Read brief texts to locate specific details	Read texts to locate and connect ideas and information	Read longer texts to connect, evaluate and integrate ideas and information
	Interpret documents	Interpret very simple documents to locate specific details	Interpret simple documents to locate and connect information	Interpret somewhat complex documents to connect, evaluate and integrate information
Communicate ideas and information	Write continuous text	Write brief texts to convey simple ideas and factual information	Write texts to explain and describe information and ideas	Write longer texts to present information, ideas and opinions
	Complete and create documents	Make straightforward entries to complete very simple documents Create very simple documents to display and organize a limited amount of information	Use layout to determine where to make entries in simple documents Create simple documents to sort, display and organize information	Decide what, where and how to enter information in somewhat complex documents Create more complex documents to sort, display and organize information

Using these regulating texts, the milestone test tasks are made to operate in similar ways as the medicine label test task examined in Chapter 3. A focus on cognitive dexterity means that the processes of locating, matching, cycling and connecting are of primary interest. The vast majority of test tasks in the “find and use information” category are require the learner to find bits of factual information within the text. The emphasis on developing tasks as stimuli means that the test task content and information is secondary to ensuring that they can be used to elicit the desired processing responses. Although the OALCF question and scoring procedures are reformulated, and do not use the complex scoring protocols developed for the ILT, the overall construction of the test tasks remains similar; logos and recognizable names and places are not used, expected information may be missing, and textual formats may be simplified. This is striking because the tasks were created specifically for use in one provincial system. There is no reason, except adherence to the regulating principles of ILT test task development principles that specific references common to students in the province can’t be made. One of the milestone test tasks uses information from an Ontario high school course description. However, the information is made-up. Rather than using actual course codes, course descriptions, the names of courses and names of subjects used in Ontario secondary curriculum documents, all this information is created anew. It’s perplexing since examining a secondary school course guide is an activity that a learner may actually need to do. It’s also perverse. In order to read the information and respond to the test questions, a learner cannot rely on previously acquired knowledge about course selection in the secondary system. Learners may have this knowledge to pursue their own goals or to

support their children. Similar to the operation of the medicine label, a test-taker is blocked from using real-world knowledge and experience.

Also similar to any ILT test task, a person's ability to do the test does not reflect what they would normally do, but is more of a reflection of their ability to rethink and reapply a repertoire of testing skills under pressure. In order to get the correct answer, test-takers must draw on test-taking strategies experience. They must be confident enough in their understandings of the technical operations of texts to rely only on their decoding knowledge, knowledge of grammatical structures and knowledge of organisational formats, rather than experiential knowledge, personal expertise and meaning-making abilities. Novel to the milestones is a variety of response formats, including short answers, indicating yes/no or true/false and multiple-choice formats. Such test-taking abilities are usually acquired after years in a formal education setting. The ILT test tasks are already unfair to those developing literacy abilities and without extensive test-taking experience, as demonstrated in the analysis of the medicine label and PDQ test item.

Removing some contextual and expected information means that learners must rely only on their knowledge of textual formats and ability to interpret texts in a more generic and abstracted form. They can't rely on experience with texts encountered in their lives and other meaning-making strategies, a crucial element of literacy learning for adult learners with limited literacy expertise. The unfairness is exacerbated in the context of an educational setting intent on supporting adults who are in the program because they have limited and interrupted formal education. They may not have or may have only very limited expertise with the very skills and knowledge required to successfully complete

the tests. Learners are expected to draw on skills and expertise they don't have in order to show 'progress'.

There are anecdotal indications that some learners are not able to complete the milestone assessments, including those with learning disabilities and mild developmental disabilities, Deaf learners and learners who have immigrated but have limited or no formal education. Those learners who can complete the milestone assessments have more extensive literacy and test-taking repertoires gained from their years in a formal education system. They are usually found in the college upgrading programs. They are able to draw on their technical know-how and familiarity with test-taking conventions to readily respond to the decontextualized and simplified milestone assessments.

Paradoxically, the assessments are deemed too simplistic for this group of learners. This is the result of the restricted set of literacy strategies that are needed to respond to the assessment questions. College upgrading learners are advantaged over other learners using an overly simplistic assessment system. The tests require many learners to display abilities they don't yet have, yet are not comprehensive enough to allow other learners to demonstrate their full repertoire of literacy abilities.

Educators must have a learner complete one milestone assessment in order to have the learner appear as an 'official' student in the provincial reporting database. A small group of educators that I spoke to described how they use a milestone unrelated to reading, writing and math skills for this purpose, since they will need time to teach their learners how to take a milestone test related to reading, writing and numeracy. They discussed how they would create tests that closely mimic the actual milestone so that students can practice and develop the distinct set of skills needed.

Yet another regulating principle from the ILT task development process is carried into the milestones, and that is the overall focus on test task difficulty and not individual abilities. While the curriculum framework was under development a controversy arose when one of the other curriculum developers attempted to use the progress indicators (referred to as performance descriptors and task descriptors in the OALCF) in the framework in a checklist and rubric in order to indicate ‘skill development’. She was told by the primary curriculum developers that the progress indicators could not be used in such a way; they only indicate test task difficulty, not individual skill development. We were all perplexed. Wasn’t that the point of progress indicators in a curriculum framework? Not using the OALCF indicators to judge learner progress is a very sensible thing to do. However, this is not what educators are accustomed to doing. In past literacy frameworks from the ministry, the use of the indicators was mandated and they were put to use by educators, appearing most often as a checklist of skill acquisition or in a rubric of skill development. Past progress indicators were also used to construct demonstration activities, a literacy activity that showed how a learner had acquired and could use sets of discrete skills. Although they had many limitations, they had the potential to be interpreted in a broad way so they reflected literacy practices in learners’ lives. The milestone tests are much more rigid in the way are delivered and reported on in the database, preventing broader interpretations and manipulations of accountability measures that may have been done in the past.

Teaching Educators a Literacy Task Analysis Pedagogy

Accompanying the framework and developed by other curriculum developers is a ‘literacy task analysis’ that is to be used to guide the development of day-to-day learning

activities. Derived from an occupational task analysis, educators are taught how to reformulate what are considered ‘valuable’ and ‘useful’ literacy activities so that the activities mimic the operation of test tasks. Within the OALCF this is referred to as a “task-based” approach. The OALCF document titled *Practitioner Guide to Task-Based Programming* explains that activities, which are reformulated as tasks, are considered to be more “authentic”, as they “contextualize” learning and integrate a full range of “skills, knowledge and behaviours” (Ontario Ministry of Training Colleges and Universities, 2011c). Additionally, the reformulated activity can then be “levelled” and “assessed” in accordance with the framework. To analyse activity and reformulate it, educators are told that a task has an action, a purpose and a context. For example, “compose an email” would not be considered a task; however, “compose an email to your supervisor requesting time off due to family illness” is considered a task. The determination of a learnable and teachable task is not based on what people actually do with texts in various situations, but on adherence to a formula and the curriculum framework. The first step in developing a task-based program, according to ministry documentation, is to choose to work on a task from the curriculum framework. The next step is to “establish understanding” of the task in the terms of the framework, *and then* to connect the task to experience.

During a training session, a program coordinator commented, “Instructors are worried about getting the tasks for learners to work on in their program; how are we supposed to know what tasks they should work on?” Projects, led by certified profilers, are underway to develop ‘task banks’ that educators can freely access for instructional use. There is no

mention of supporting educators in developing their curricula using actual literacy materials and situations that learners experience in their lives.

The emphasis on task-based learning led to a perplexing pedagogical clash between what is called “skills-based” and “task-based” approaches, leaving educators confused and frustrated. A task, they were told in a training session, produces something tangible and has a measurable outcome. For example, reading a set of instructions to operate a piece of equipment is task-based learning. However, completing a set of grammar exercises is considered skills-based learning. The previous framework, they are told was skills-based, but the OALCF is task-based. (This is immensely confusing because both frameworks contain elements that are skills and tasks.) Since all learning in the OALCF is formulated as tasks, educators are encouraged to restructure their own approaches in a similar way. The distinction between the two frameworks, and the absence of a listing of academic skills in the OALCF, prompted curriculum developers from school board programs to ‘fill in the gaps’ in the OALCF. They incorporated listings of discrete skills from the previous framework into the OALCF. What ends up being produced is a shadow curriculum framework that operates alongside the OALCF. One of its stated functions is to “give evidence of learner progress within a task-based framework when the learner is slowly building a foundation of skills and knowledge” (Updater, Fall 2012, p. 13).

Two Distinct Models of Testing and Curriculum

The distinction between skills and tasks is a textually coordinated consequence of the incorporation of two distinct curricular and assessment models in one education system. Until the OALCF, the provincial system had devised its curriculum frameworks using varying intensities of connection to the Ontario curriculum, which, in turn, is based on

the predominant reading comprehension model used in formal education. The alignment made some sense¹⁹, since close to 70 per cent of adult learners in provincial programs want to access the secondary and post-secondary systems, and other educational programs (Essential Skills Ontario, 2012). The proportion of adults wanting to access further education had increased steadily from 2005 until 2011, the last year when data was accessible. A curriculum developer working on the OALCF explained how she came to recognize that the Essential Skills would not work for students who wanted to access other educational programs:

In relation to the Essential Skills and connection to learning, the learning, particularly learning in formal education—the connection simply wasn't there. The acquisition of appropriate academic skills is first and foremost [in most programs]. There was a sweeping aside of anything related to academic acquisition in the Essential Skills.

The distinction between the OALCF locating information model and the reading comprehension model is apparent when analyzing assessments that are constructed using the distinct models. Similar to the way that the medicine label and then a PDQ test task were analysed previously, an analysis of the Ontario Secondary School Literacy Test (OSSLT) and an OALCF milestone can demonstrate the difference between the kind of

¹⁹ The alignment didn't make sense however when addressing broader social practices and day-to-day engagements with literacy in adults' lives. Having curricular mechanisms that support the development of broader social practices, in which academic literacy may have a prominent place, makes more sense.

literacy developed in the school system, and the kind of literacy developed in the OALCF.

The OSSLT is tied directly to the Ontario Curriculum, and is designed to demonstrate literacy skills acquired in Grades 7, 8 and 9. Passing the test is a graduation requirement for most students. Adults enrolled in secondary school programs do not usually take the test. It is up to each principal in a program to decide if it will be administered to adults. However, instead of taking the test, they must take and pass the Ontario Literacy Course (OLC), which is closely aligned to the test format and content. In making the comparison, I am not suggesting by any means that the OSSLT is a good or even acceptable assessment of literacy abilities. Its high-stakes use in the secondary system has been the subject of critique (cf. Cheng, Klinger, & Zheng, 2007; Klinger & Rogers, 2011; Luce-Kapler & Klinger, 2005). I merely want to point out the difference between the ways that the OALCF and Ontario Curriculum assess literacy, in order to reveal how the OALCF is disassociated from Ontario's secondary and post-secondary systems.

The OSSLT is markedly different from the OALCF milestones and other ILT spin-off assessments because of the types of texts used; the types of questions asked and related reading and thinking processes they elicit; the types of responses required; the integration of content and cultural knowledge; and the use of linguistic knowledge. The table below provides a summary of the comparative analysis.

Table 14: Distinct Approaches to Testing in the OSSLT and OALCF

	OSSLT	OALCF Milestones (Reading)
Type of text	Unaltered and unedited texts from newspapers and documents; texts contain references to Ontario place names, people and organizations	Altered, generic texts with no recognizable references
Type of test questions and reading processes	Questions require the test-taker to explain, describe, summarize and draw conclusions In order to formulate a response, a deep reading of the text from beginning to end is required; then the test-taker may have to return to particular parts and re-read	Questions require the test-take to locate small bits of information; they are asked to match, identify, locate, sort and describe In order to locate the information, a test-taker can quickly and superficially skim and scan the text
Types of responses	Two main types of responses are used: multiple-choice and fully composed written responses up to a paragraph in length	A few types of responses are in use: short answers requiring one word or phrase, multiple choice, yes/no, sorting; no responses require fully composed sentences or paragraphs
Content and cultural knowledge	Draws on content (general science, current events), cultural knowledge (living in Ontario) and contextual knowledge (derived from text) Draws on personal experiences and opinions	Does not draw on content, cultural and contextual knowledge Focus is on the textual format and presentation of texts, not their content and meaning
Linguistic Knowledge	Linguistic knowledge related to word meanings, idioms and expressions, metaphorical meanings, grammatical conventions	Some questions focused on word meanings

The comparison helps to emphasize the distinct operation of the milestone assessments and their antecedent assessments in spin-off tests, and even ILT test tasks. It is not known yet how learners who want to access the secondary system will be effected.

Contradictory and Distinct Assessments for Accountability

In addition to the milestones, programs will have to use two additional assessments, and they have the option of using a fourth. Each assessment is derived from distinct sets of constructs and approaches. While a diversity of assessment approaches is important, three of the four assessments (i.e. milestones, culminating tasks and learner gains) were meant

to provide complementary information about learner ‘progress’. The table below provides an overview of the assessment scheme.

Table 15: LBS Assessment Scheme

Assessment	Purpose	Underpinning Model and Approach
1. Milestones	To produce a measure of learner progress according to ILT/ES level	ILT level descriptions ILT test development principles
2. Culminating tasks	To produce a measure of goal completion	A mixture that includes curriculum developers’ interpretations of the OALCF, past LBS framework, the Ontario Secondary Curriculum and OSSLT
3. Learner gains (under development)	To produce a standardized measure of learner gains using an ILT score	ILT spin-off assessment created for Ontario programs
4. Transition assessment (not mandated)	To indicate that a learner is able to actually meet the requirement or do the activities related to their reason for being in a literacy program	A variety of tests and assessments chosen by programs and connected with secondary and post-secondary access, employment training and recognized certifications

Although the intent was to produce three assessments that aligned with the ES/ILT, problems have been recognized. When a version of the learner gains assessment was field-tested, a curriculum developer told me that the results between the milestones and learner gains tool “didn’t relate”. Although the general development principles and processes are similar, the milestones do not adhere to the complex scoring protocols and psychometric processes devised for the ILT and spin-off tests. Subsequently, it is not surprising that results would be very different.

The third mandated system, culminating tasks, is a mix of approaches that reveals how tensions in the development stage ended up playing out. The culminating tasks are supposed to reflect the learning that must be achieved in five distinct areas called goal

paths that were established in the system (i.e. secondary credit, post-secondary entry, apprenticeship, employment and independence). Other individuals, but not the developers of the milestones, were hired to create the culminating tasks that would be used to produce a measure of goal path completion. The assessments end up being a mixture of approaches that reflect the expertise and program concerns of the developers, and the programs that they represent. Such an incongruent mix of assessments will not provide the ministry with comparable data.

An Inequitable Performance Management Framework

The tension between curricular models and the two distinct curricular approaches plays out in the performance management framework, resulting in sets of inequitable measures that will be used to judge program outcomes and allocate funding. Described in Chapter 1 was the gradual shift from using program activity measures to using program outcomes measures in the LBS managerial framework. (Financial accountability measures and processes operate independently.) The table below provides an overview of the measures that will be used in the new PMF. Only one of the measures, learners served, reflects the former interest in program activity. Further, it carries only a 10% weighting when making funding decisions. In comparison, program outcomes measures will carry a 90% weighting. Program outcomes are divided into two categories: 1) customer service, and 2) effectiveness. It is the effectiveness category that is directly connected to the curriculum

framework and assessment scheme. The measures are scheduled to be in full use by April 2014²⁰.

Table 16: Literacy Program Performance Measures

	Measures	Measurement Tool
Customer Service (30%)	1. Customer satisfaction	Customer satisfaction survey currently in use
	2. Service coordination	Multiple service coordination indicators such as referrals to other EO programs
Effectiveness (60%)	3. Suitability and learner profile	Multiple suitability indicators such as level of education, time out of training, age, etc.
	4. Learner Progress	Milestones
	5. Completion of Goal Path	Milestones Culminating Tasks Learning Activities
	6. Learner Gains	Gain on IALS 500 point scale in prose literacy, document literacy and numeracy
Efficiency (10%)	7. Learners served	Actual number of learners registered aligns with predicted numbers

(Adapted from Ministry of Training, Colleges and Universities, Foundation Skills Unit and Parker Management Consulting, 2013, Section 2, p. 6)

Both apparent and less apparent systemic inequities are embedded in the PMF, namely within the effectiveness category. Favoured and privileged in the PMF are college upgrading programs over community-based and school board programs. First, college programs and their teachers are protected from the inherent inadequacies, confusions and contradictions of an ES/ILT informed curriculum, as they maintain their own independent

20 Modifications were made to the original PMF for the 2014-2015 funding year: the weighting of the effectiveness category was reduced from 60% to 50%; a learner gains tool is not yet in use; and the use of culminating tasks is no longer required.

curricular system that is directly aligned with the Ontario secondary school curriculum²¹. This is accomplished with the inclusion of a category in the PMF called learning activities (highlighted in the table above). The category allows college programs to have distinct elements included in the PMF. Other programs can use the category if they want, but it doesn't have the same impact. The colleges have a formal curriculum that is used to grant a high school equivalency certificate. In order to maintain the integrity of that certificate, their representatives lobbied aggressively for the inclusion of the category. It means that they keep their curricular approach intact, without the need to reorganize, rework materials, create new activities, etc. As one curriculum developer said, "The OALCF doesn't touch them." The colleges will continue to use their own curriculum, which is aligned to the Ontario Curriculum, and their educators will not have to rework materials and processes in the same way as those in school board and community-based programs.

The effort to maintain their curricular approach plays out in the culminating tasks. Those test tasks created by curriculum developers from the college operate the same way as a test task used in the OSSLT, incorporating similar types of texts, test questions, responses, related reading processes, strategies, bodies of knowledge and skills. The

21 Ironically, the college system was the focus of a recent ES curricular reform project that received close to \$5,000,000 in funding from the federal government. The thinking is they have the adults who are at mid-high level 2, and can readily get to level 3. But as the Ontario college upgrading system is demonstrating, they may want nothing to do with an ES/ILT informed framework, knowing that their learners need the literacy abilities developed in accordance to the secondary curriculum in order to gain access to the college system.

college maintains their curriculum and ensures its active presence in the PMF using the categories for culminating tasks and learning activities. Their program activity will be judged in part on their existing and well established curriculum. School board and community programs are not given the same privilege, even though they may also have well-established curricular approaches.

Further, and a less apparent systemic inequity, is the protection and privilege that college students are afforded because they are likely to have more extensive formal education compared to learners in community-based and school board programs. That experience provides learners in college programs with the literacy expertise needed to readily handle the assessments derived from the ILT. Whereas school boards and community programs tend to work with learners with more limited literacy experiences and from the three 'cultural streams' organized in the LBS system: Francophone learners, Deaf learners and those from First Nations communities referred to as Native learners. In effect, teachers and learners in school board and community programs will have to do more work and spend more time addressing the OALCF. An educator working in a school board program expressed her frustration and disillusionment:

E: It's something I know we have to do. It's not something I'm happy about. It's not going to help us. It's just another layer that we are going to have to get thorough to get our funding, in order to be eligible for funding. This is not wonderful at all. We're doing just fine without it. We don't even need it. It's a big excuse for what? They should have asked the field.

C: They say they asked the field.

E: Who did they ask? Not the grass roots people. Not the people in the classroom. There's no merit to this. Who is this serving? Do you think a

student will go away with this and say I can do these tasks at this level? Big whoop. What does that mean to someone? It doesn't benefit them in realizing their goals. It will be another language at another level for people to do the stats. It's very disheartening.

To generate the stats, the OALCF measures are fed into service plans that must be set up for each student. The service plan is the key component of a new provincial database—the Employment Ontario Information System and Case Management System or EOIS/CAMS. The database is an off-the-shelf-system developed specifically for ‘managing’ individuals receiving income assistance or other social services, including supports to find employment. The literacy education program is part of Employment Ontario (EO), a structure set up by the Ministry of Training, Colleges and Universities to oversee all services and organizations involved in employment related activities. Situating the literacy education program within the EO system, and tracking programs and learners using the database needs further investigation, as it would reveal other aspects of the institutional arrangement. In many ways this aspect of the arrangement is more apparent to educators and program coordinators than is the curricular arrangement. They must obtain confidential and detailed information about learners that will be entered into the database. In addition, they will have to demonstrate that they are making referrals to a variety of other programs, including employment counselling, addictions counselling, other social services and children’s aid, etc. Program coordinators and educators shared their concerns during a training session. Afterwards, one educator explained, “There’s a trust factor between us [instructors and learners]. They trust us not to pass on their personal lives. When seeing a counsellor they know this may happen, but not when seeing a literacy instructor.” During the session when educators and

coordinators shared concerns, the group developed a list of issues that they wanted to bring to the ministry. The milestones and curriculum framework appeared only a couple of times in the list. The majority of the 20 or so issues were focused on the new data management system, the collection of personal information from learners and implications for both learners and programs. Although concerns were passed along to ministry representatives, very little has changed in the way the database system is set up and used.

Attempting to Address Concerns

Provincial policy-makers do hear about concerns and may have concerns themselves. A former curriculum developer who worked on the OALCF, and who continued to have occasional contact with provincial policy-makers, told me that the staff who are now responsible for overseeing the LBS program²² are wondering why some programs “aren’t compliant”. The response has been twofold: a focus on ‘implementation training’ and feedback surveys. However, neither of these mechanisms is designed to evaluate the OALCF from a broader perspective. They are set up so that the OALCF is always considered on its own terms, and with the (mis)assumption that the OALCF is not the problem. The problems, according to such thinking, are due to the way the OALCF is understood (or not understood) and used. However, no one has ever reviewed or

22 The policy-makers responsible for overseeing the LBS program are new. They were not involved in the development of the framework and were not involved in LBS previously. What they likely see is a comprehensive set of documents and clearly laid out processes, unaware of underlying tensions, contradictions and inequities.

evaluated the project from the perspective of adult learning, literacy development and curriculum design. It has however been reviewed from the perspective of an Essential Skills and ILT alignment.

Just before I was hired to work on the OALCF, a draft version of the curriculum, related tasks and some sample activities (a precursor to the milestones) were piloted. Questions accompanying the piloting were only concerned with determining the use of the documents. No questions were asked about the overall approach, and how this may or may not fit into current activities in programs. In a similar fashion, once documents had been produced and were available for a few months, an OALCF ‘feedback survey’ was widely promoted and made available on-line. It too focused primarily on the use of documents. Questions on the survey were worded to ensure that the use of the documents was discussed only within the frames and intentions of the framework. No questions were asked about the use of the framework itself. To date, no mechanisms have been established to determine the reliability and validity of the assessment scheme.

At the end of 2013 a learner gains tool had not yet been named. It appears policy-makers continue to search for an ‘appropriate’ assessment that is aligned with the five ILT levels. The new PIAAC spin-off, *Education and Skills Online* was field tested in Ontario during the summer of 2013. The year before, a test from Bow Valley College, likely the test that was contracted for development at the beginning of the OALCF project, was also field-tested. Neither was named as the new learner gains test.

Summary

An assemblage of OALCF texts and assessment devices, regulated by the ILT level descriptions and test task construction methods, are integrated into the performance

management framework, which is used to judge program outcomes and allocate funding. Ontario's curriculum reform was initiated in 2009. At the time, provincial policy-makers were already oriented to finding ways to use the Essential Skills and ILT. In order to produce a curriculum framework based on the Essential Skills, and an assessment tool derived from the ILT, a distinct expertise was needed. Two members of the team of curriculum developers contracted to work on the OALCF were certified Essential Skills profilers. Their expertise was valued over the others to work on the main aspects of the project, namely the curriculum framework and a related assessment.

The categories and sub-categories devised for the OALCF, referred to as competencies and task groups are aligned with most of the Essential Skills categories and sub-categories. The ILT locating information process is carried into the development of the main competencies and task groups (i.e. reading, use of documents and numeracy). The writing category was created anew and, as a result of not being regulated by the ES/ILT, is much more expansive. Reading related categories are focused on manipulating bits of information using mostly informational texts. Use of fiction is an afterthought. The competency "find and use information" restricts access to a range of textual formats and reading purposes. Overall, the creation of a set of new OALCF skill categories (competencies and task groups) affects learners and educators. The reformulation means extra work for programs and extra effort for learners without additional program support. The desire to make an alignment with the ILT's 'international standards' of literacy, has resulted in some perplexing interpretations of the ILT levels in comparison to OALCF levels. The general principles of ILT test task development, in coordination with the level

descriptions, are used to create a series of assessments to measure learner ‘progress’, which will eventually be used to make decisions about program funding.

A focus on cognitive locating information means that the processes of locating, matching, cycling and connecting are of primary interest in the assessments. Further, the other general approaches are followed. Logos and recognizable names and places are not used, expected information may be missing, and textual formats may be simplified. This is striking because the test tasks were created specifically for use in one provincial system. There is no reason, except adherence to the regulating principles of ILT test task development principles that specific references common to students in the province can’t be made. Removing some contextual and expected information means that learners must rely only on their knowledge of textual formats and ability to interpret texts in a more generic and abstracted form. They can’t rely on experience with texts encountered in their lives and other meaning-making strategies, a crucial element of literacy learning for adult learners with limited literacy expertise. Learners are expected to draw on skills and expertise they don’t yet have in order to show ‘progress’. There are anecdotal indications that some learners are not able to complete the milestone assessments, including those with learning disabilities and mild developmental disabilities, Deaf learners and learners who have immigrated but have limited or no formal education.

The assessments and the curriculum framework are different from the reading comprehension model of testing and curriculum development (related to reading and literacy) in the K-12 education system, and in all previous adult literacy frameworks. The fundamentally different operation of a locating information framework and reading comprehension framework can be seen in a comparison of the main OALCF assessment

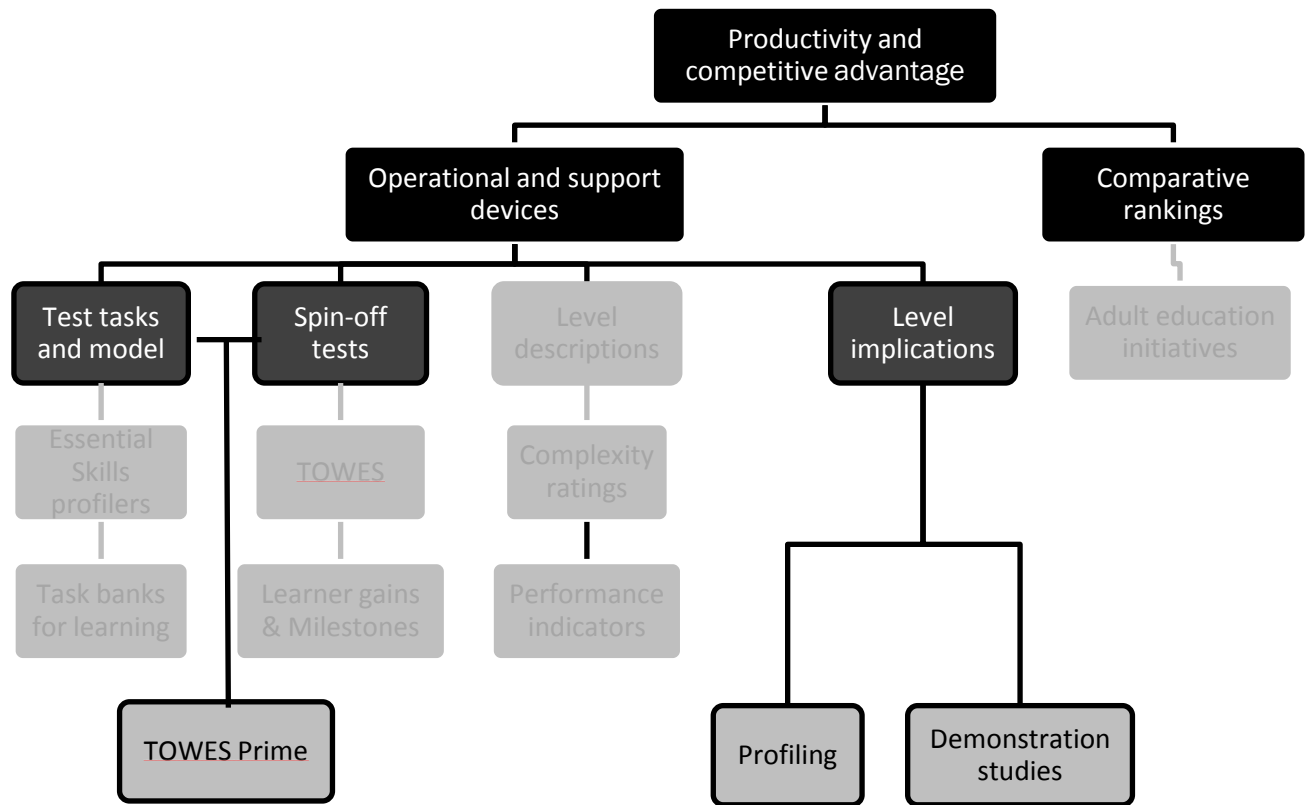
and the Ontario Secondary School Literacy Test used in Ontario's K-12 system. The majority of adult students in the provincial literacy system want to access the secondary and post-secondary education systems. They are learning and need to acquire abilities and practices reflected in a reading comprehension curricular approach. The OALCF framework and accompanying milestone assessments do not reflect this approach. In other words, the OALCF does not operate in the same way as the curricular approach that many programs use, and the assessments themselves require some students to demonstrate 'progress' with abilities they have not acquired. The OALCF uses an unfair assessment approach.

Programs run by community colleges are tightly aligned with the secondary system and offer a high school equivalency certificate. They lobbied to ensure that their secondary school equivalency curriculum remained intact. This results in a two-tier performance management framework, in which the colleges are judged differently than community programs and school board programs. Other groups working in school board and community programs, without the same influence, responded in different ways.

Curriculum developers representing Francophone learners arranged to be trained and certified as Essential Skills profilers so they would be able to better understand the new curricular arrangement. A year after the OALCF was completed school board curriculum developers produced extensive support documentation to "fill in the gaps" and rework the curriculum framework so an alignment with the K-12 system could be made. Educators in community-based and school board programs have to devote scarce time and resources to accommodate the OALCF and prepare learners to do the assessments, taking time away from meaningful, relevant and purposeful learning and program coordination

activities. It is an inefficient use of their time and expertise. Further, learners have to learn a series of reading processes and strategies in order to complete the milestone assessments. Demonstrating their disconnection from other learning activities, the only way to prepare students for the milestones is to simply copy the assessments so students can practice taking the test. They aren't using sets of 'transferable skills' to do the test. Intentions of the project to be 'learner-centred' and make the work of educators 'easier' are displaced by a system-centred accountability achievement that does neither.

7. Directing Education Policy and Developing Pedagogy



Concerted efforts have been and continue to be made to direct adult education policy and develop pedagogical and instructional solutions to respond to Canada's literacy 'challenges'. Much of this work has been initiated and overseen by the former manager of the IALS and ALLSS surveys. Once leaving Statistics Canada in 2005 (just before the Office of Literacy and Essential Skills was created) Scott Murray formed a consulting firm (www.dataangel.ca) and has been actively engaged in a variety of policy persuasion projects, independently and in collaboration with researchers, psychometricians and educators. As a policy entrepreneur, Murray has worked actively to convince policy-

makers, particularly those at the provincial level who oversee literacy education, to alter the way they deliver education in order to ensure that adults acquire a ‘suitable minimum’ level of ability as measured by the ILT. The determination of a ‘suitable minimum’, the attainment of Level 3, was made after the first round of international testing (the IALS), using what I refer to as a level implications scheme. Individual and socio-economic consequences of being categorized into each of the five levels, including the ‘minimum Level 3’ standard were constructed based on what one literacy researcher has called “unsupported inferences” (Sticht, 2013). The current ILT manager recently announced that reports related to the third round of testing (PIAAC) would no longer contain references to the level implications, since they are “an interpretation” of the results (Thorn, 2013). However, the concept of a ‘suitable minimum’ is apparent in PIAAC reports, as some key ranking tables display results using a solid line that demarcates the proportion of populations at or above Level 3 from those at lower levels (OECD, 2013). Further, the statement that Level 3 is a ‘suitable minimum’ has already had far-reaching impacts in adult literacy education policy development, and is now a taken for granted ‘fact’ that is rarely questioned. Included in the analysis in this chapter are two related policy devices derived from the level implications: interactive mapping used to indicate where people with ‘literacy challenges’ (i.e. those below Level 3) live, and the profiling of adults to demonstrate which groups of adults will realize the greatest return on investment if they reach Level 3.

After nearly 15 years spent attempting to persuade policy-makers to take action, starting with the development of the level implications in the 2000 and proceeding to the development of policy devices in the later 2000s, entrepreneurs under the direction of

Scott Murray have turned their attention to the development of pedagogical technologies, specifically an on-line instructional and assessment system. Rather than attempt to convince policy-makers how to organize their literacy education programs, efforts are now focused on developing the solutions themselves, and then selling those solutions and ‘interventions’ to interested governments in Canada and internationally. Supporting the development of the instructional and assessment system are the ILT test task development methods (i.e. scoring protocols and locating information model), in addition to the regulatory frame of item response theory. The pedagogical approach is devised from “an IRT-based, computer-adaptive testing and instruction program” (Mosenthal, 1998, p. 271).

Entrepreneurial efforts have been and continue to be funded primarily by the federal government through the Office of Literacy and Essential Skills. Funding was also obtained through a now defunct national education organization, the Canadian Council on Learning. During the development of the OALCF, the Ontario government also contributed funding to the development of an assessment related to the on-line learning system.

A Level Implications Scheme to Direct Policy Attention

The level implications scheme is a set of statements that connect the five ILT levels with socio-economic consequences. This connection was not based on empirical study or analysis of the ILT data, but was made using a series of discursive manoeuvres and assumptions. The full set of level implications, reproduced in the table below, first appeared in the third of three reports related to the IALS (Organization for Economic Cooperation and Development and Statistics Canada, 2000, p. ix).

Table 17: Level Implications Scheme Devised for the IALS and ALLSS

Level 1 indicates persons with very poor skills, where the individual may, for example, be unable to determine the correct amount of medicine to give a child from information printed on the package.

Level 2 respondents can deal only with material that is simple, clearly laid out, and in which the tasks involved are not too complex. It denotes a weak level of skill, but more hidden than Level 1. It identifies people who can read, but test poorly. They may have developed coping skills to manage everyday literacy demands, but their low level of proficiency makes it difficult for them to face novel demands, such as learning new job skills.

Level 3 is considered a suitable minimum for coping with the demands of everyday life and work in a complex, advanced society. It denotes roughly the skill level required for successful secondary school completion and college entry. Like higher levels, it requires the ability to integrate several sources of information and solve more complex problems.

Levels 4 and 5 describe respondents who demonstrate command of higher-order information processing skills.

Their development can be traced in predecessor reports. In the second of the three IALS reports, a reference is made to one key aspect of the implications scheme—the designation of Level 3 as a ‘suitable minimum’ proficiency level: “Level 3 is considered by experts as a suitable minimum for coping with the complex information produced in the knowledge society” (OECD & Statistics Canada, 1997, p. 131). Absent from ILT reports is a discussion of who the experts are, and how the designation of a minimal proficiency was determined. There are however some traces of information that indicate the expertise used to develop the level implications may have been associated with one person. First, the experts and their roles at the time are identified in an ERIC database abstract for the first IALS report:

The findings were reported in four ways by three researchers. Irwin Kirsch (Educational Testing Service, Princeton, New Jersey) presented a framework for understanding/interpreting literacy levels on three scales (prose, document, and quantitative) and discussed the study results in the context of literacy's multifaceted nature. Stan Jones

(Carleton University, Ottawa, Canada) analyzed the distribution of literacy across national populations and among different demographic subgroups and explored the relationship between literacy practices (at work and in the community) and levels of literacy. T. Scott Murray (Statistics Canada) considered the policy implications of the study findings (ERIC Abstract, n.d.).

In other words, Irwin Kirsch developed the test tasks and level descriptions; Stan Jones led the statistical analysis of results and compared results from the test with results from literacy use questionnaires; and Scott Murray focused on policy implications. Both Irwin Kirsch and Stan Jones have stated that the levels and test results should not be used to make statements about an individual's ability to respond to literacy demands at home, at work and in the community. Kirsch stated the following only one year after the level implications first appeared:

[T]hese data do not reveal the types of literacy demands that are associated with particular contexts in this pluralistic society. That is, they do not enable us to say what specific level of prose, document, or quantitative skill is required to obtain, hold, or advance in a particular occupation, to manage a household, or to obtain legal or community services, for example (Kirsch, et al., 2001, p. 9).

In a separate and later statement, Jones stated that the results can't be used to compare individual proficiency with various literacy demands for the following reasons:

Little is known about the levels of literacy proficiency needed to function in different contexts or perform different tasks. This is in part due to the lack of comparable measures of literacy proficiency, and also to the lack of any consistent framework for assessing literacy needs (Boudard & Jones, 2003, p. 194).

The two statements indicate that the level implications scheme was not agreed upon by experts, and presumably was asserted despite disagreements.

Critiques of the Level 3 'Suitable Minimum'

In public and policy discourse Level 3 has become a demarcation between 'high-skilled' and 'low-skilled', those with 'adequate' abilities and those with 'inadequate' abilities.

While the terms literate and illiterate are not used in ILT reports, substitute terms such as 'suitable minimum' and 'adequate' skill level operate in the same way to establish an 'acceptable' level of literacy proficiency and establish a boundary between those categorized on either side. Those involved in producing IALS reports, argues one researcher, "impose a series of arbitrary cut-off points, based on what they think acceptable functioning in society must be" (Payne, 2006, p. 228). This happened despite claims that the ILT is supposed to represent literacy on a continuum.

Further, the designation of Level 3 as a 'suitable minimum' occurred despite adults' own interpretations of their abilities and 'functioning' (Sticht, 2011). One powerful reason to question the designation of a 'suitable minimum', argues Sticht, is that the vast majority of adults categorized into Levels 1 and 2 and labelled as having 'inadequate' and 'weak' skills say they don't experience literacy challenges in their day to day lives. Another researcher is more pointed in her critique of the way adults' judgements of their abilities have been disregarded:

I find it disturbing that the reports send the message that the experiences and assessments of the test persons themselves have no validity compared to the test results. Is it viable for the adult education community to let surveys convey the impression that 'adults just don't know how stupid they are' (Henningsen, 2007, n.p.)?

Further yet, the designation of a Level 3 cut-off was made without empirical study to support the decision (St. Clair, 2012; Sticht, 2011). And experts involved in the ILT, as demonstrated above, refute the designation (Sticht, 2011).

The use of the Level 3 cut-off and resulting focus on the ‘inadequacies’ of adults categorized into Levels 1 and 2 means that a unique standard is introduced into existing learning and literacy development systems (Payne, 2006). Educators and education policy-makers grapple with the meaning and uses of the ILT levels alongside grade levels and education attainment levels. The closest one can get to figuring out what Level 3 means in people’s lives is to relate the education attainment of test-takers to the scores and levels. While it may be possible to say that Level 3 is related to post-secondary attainment, any other statements about the meaning of Level 3 in people’s lives are unfounded and potentially damaging, constituting, as Sticht writes “a maliteracy practice” (2011, n.p.).

So where did the Level 3 ‘suitable minimum’ designation come from? One recent analysis suggests that the Level 3 cut-off point is determined primarily by the methodological framework used for test development (i.e. item response theory): “For the IRT model to make sense, 50 per cent of the population should score below 250 points or so. Therefore the model is designed on the premise that at least half the respondents will be below Level 3” (St. Clair, 2012, p. 769). The operation of the framework would also help explain the perplexing and often shocking finding that about half of a tested population find themselves categorized into Levels 1 and 2. However, the 250 point mean was only used in national predecessor tests. Afterwards, test developers devised their more complex scoring system without adhering to a mean. In the current score and level

system, Level 3 has a range of 276-325 points, well beyond the 250 point mean. While some residual methodological influences may remain, other processes have been used to develop the Level 3 cut-off and its accompanying socio-economic implications.

Discursive Manoeuvres and Assumptions in the Level Implications Scheme

The level implications scheme is devised using a series of discursive manoeuvres focused on altering understandings of the design and operation of the ILT, in combination with assumptions about the connection between literacy proficiency and economic outcomes.

The ILT initiative is specifically designed to produce population measures, and not measures of individual skills and abilities. Contradicting the fundamental operation of the ILT, a focus on the individual is clearly established in the first level implications statement: “Level 1 indicates *persons* with very poor skills, where the *individual* may, for example, be unable to determine the correct amount of medicine to give a child from information printed on the package” (italics are mine) (Organization for Economic Cooperation and Development and Statistics Canada, 2000, p. ix).” Twice, in this short preliminary statement, the reader’s attention is directed to make a connection between the results of testing and individuals.

In the next discursive move, the ability to do a test task is not simply considered within the confines of the testing situation, but is extended to suggest that the test tasks are actually things people encounter outside the testing situation. The extension is accomplished by suggesting that failure to correctly respond to the medicine label task means that *all* those at Level 1 may not be able to read *any* medicine label. The test task was appropriated and used to indicate a minimal level of individual ability in the level implications. Further, by setting up a scenario in which the medicine label must be read

for a sick child, the writer of the level implications is leading one to draw a conclusion that an inability to read the label leads to a dangerous situation, since those who can't read such a 'basic' piece of information are perhaps irresponsible and even a danger to themselves and others. The analysis of the medicine label test task in Chapter 4 demonstrates how contradictory and completely misinformed such an assumption is. More worrisome however is the way a sweeping and pejorative social judgement is made based on an interpretation and assumptions. It is unethical, as Sticht (2011) previously alluded to, in the context of large-scale testing.

In another discursive move, sweeping statements describing the operation of the test and its connection to reading and print-based abilities are devised, despite the test's disregard of how individuals actually use printed information (except of course to activate cognitive processing). The test does not measure how one reads but only uses reading to measure a form of mental processing. However, a shift is made to suggest that the test does indeed provide information about reading abilities: "Level 2 respondents can deal only with material that is simple, clearly laid out, and in which the tasks involved are not too complex...It identifies people who can read, but test poorly" (ibid). The level description for Level 2 prose tasks does not use any of the above terms or phrases to describe test task difficulty. The description is reproduced below:

Some tasks in this level require readers to locate a single piece of information in the text; however, several distractors or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the reader to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.

Nowhere does it state that these tasks are “simple, clearly laid out” and “not too complex”.

In the next discursive move, ability descriptors are integrated throughout the level implications. These descriptors are used to judge individual proficiency and are predominant in the first two levels. All are negative, entrenching individuals in a deficit perspective. Individuals are described as having “very poor skills”, a “weak level of skill” and a “low level of proficiency”. They may “test poorly” but still have “coping skills to manage”. Knowing that the ILT does not provide measures of individual proficiency, the descriptors, similar to the pejorative social judgement made about an inability to read a medicine label, are unethical in the context of testing. Then, following a similar pattern as Level 1 statements, another pejorative social judgement is made about individual performance at Level 2. A person’s performance on the ILT at Level 2 “makes it difficult to learn new job skills”. No empirical connection has ever been established between a proficiency score and actual job performance.

Appeal of the Level 3 ‘Suitable Minimum’

The Level 3 ‘suitable minimum’ standard has been used to direct adult education policy, most notably in Ontario, but also in other provinces. Alberta has constructed an education plan for the future around the obtainment of a Level 3 minimum for the majority of adults (Alberta Advanced Education and Technology, 2009). The province has also produced a not yet mandated assessment and instructional approach (i.e. Bow Valley College, 2011), and a set of benchmarks aligned to the ILT (Alberta Reading Benchmarks, 2011). Perhaps one of the reasons Level 3 is appealing is an association with education attainment levels made in the level implications: “It denotes roughly the skill level required for successful

secondary school completion and college entry.” In other words, it makes some sense that people need at least a high school level education to obtain a decent job. However, there is also a profound irony in this move since so much of the ILT initiative is premised on providing an alternative proficiency level to education attainment.

In addition to the Level 3 ‘suitable minimum’, the level implications statements as a whole have been put to use in other ways, which will be described in the next sections. They were incorporated into PDQ, resulting in a perverse suppression of learner employment goals and aspirations. Their most developed use can be seen in the work of policy entrepreneurs who have constructed policy persuasion devices aimed at shifting policy attention away from adults categorized into Levels 1 and 2 (often including those with limited and interrupted formal education, such as Aboriginal Peoples and people without recognized credentials, such as immigrants) to adults categorized at the high end of 2 who could readily move to Level 3 (often including those with a completed secondary education who are working or attending post-secondary institutions) in an effort to ‘focus on the best’ and ‘ignore the rest’ within the ILT competitiveness project.

PDQ Test Results and the Level Implications

After a test-taker completes the PDQ spin-off test a report, the “PDQ Literacy Profile”, is automatically generated. The report matches an ILT level obtained by the test-taker with statements about the implications of test results. Framing the statements are the various assumptions and discursive manoeuvres employed to create the level implications.

The PDQ report transposes the level implications statements directly into the context of literacy education, pedagogy and learners’ lives. Someone involved in developing the PDQ test used the level implications to regulate the series of statements that are used to

assemble individual profiles based on test results. The table below presents excerpts from the report to compare them with the level implications. Although the deficit-sodden language is removed, the overall intent and general condescending tone remains intact.

Table 18: Level Implications and PDQ Results Report

Level 2 Implications Statements	PDQ Results Statements at Level 2
Level 2 respondents can deal only with material that is simple, clearly laid out, and in which the tasks involved are not too complex.	When texts are well organized and easy to read, you can usually get the information you want.
They may have developed coping skills to manage everyday literacy demands, but their low level of proficiency makes it difficult for them to face novel demands, such as learning new job skills.	In your current situation at work, at home and in the community, you are most likely able to get by most of the time. However, you probably find it difficult to deal with texts you have never seen before or complete new kinds of tasks using prose texts.

The PDQ reports also incorporate the level descriptions, which are used to develop a series of statements aimed at directing future instructional efforts. The statements are directed at the learner who is compelled to improve “prose, document and quantitative literacy skills” in order “to make a big difference” in his or her life. Improving these skills, according to the report, will “increase your chances of finding a job or a better job; making more money; and doing things more independently” (PDQ Locator Literacy Profile, November, 2011).

In one instance, an educator recalled what happened when reports were provided for her students after completing the PDQ. The students were enrolled in a health care preparation program, and were preparing to enter a health care certification program offered at both the secondary and post-secondary levels. They each received a PDQ report based on their individual test results. Many of the reports indicated that their level meant they could only be a cleaner or food server within the health care field. Based on

her experience, the educator knew the students would be capable of entering a health care certification program. She also taught students in the certification program through another organization, and was well aware of the skills needed to do well in the course.

Being told that they would not be at the appropriate level to succeed in their chosen field could have caused them to “back away from their goal”, she said. She prevented her learners from seeing the results of the test. She described what happened when students took the test as part of a provincial initiative to try out ILT spin-off tests in programs:

When students did the PDQ field test, they had been in our program for several months or more. However, they truly struggled with the test in spite of their demonstrated literacy learning while in the program. Several students went on to take PSW [Personal Support Worker] training and are working in their field, yet they were not highly successful in PDQ.

When looking at a report generated after I took the test with my colleague, we were told what skills we needed to strengthen in order to obtain Level 3, which we weren't able to achieve as we discussed the test together, and responded in ways that we thought best fit the directions. While we both laughed at the results and easily brushed them off, the consequences for learners are likely more serious. However, even we were struck by the insult of the final report. We were told to learn to better “identify, locate and integrate information.” My colleague commented:

Isn't that condescending! It's not very meaningful. Do you really need to build those skills? There's a huge disconnect between the individual's true abilities and what the test reports, what the PDQ report is telling them. It's just audacious to say that about prose 2 skills, and what they mean. There's such a huge disconnect.

During the piloting phase for a newly developed course and accompanying curriculum, one of the project's curriculum developers said she was surprised to see that the participants involved "really liked being tested." She explained further: "They thought it gave them something concrete to understand." She went on to describe how the course instructor used the PDQ results to counsel students about their readiness to pursue certain occupations. The curriculum developer recalled the process:

She sat down with each of the participants after they had done PDQ and said, 'Here's your score. Here's some sample jobs that might match up to the score. If you think you're going to be a chef, but your reading score doesn't have you quite there yet, perhaps you could start with a kitchen assistant or something.' She made that score real for them as she started talking about the type of jobs they could get that require that level of reading or document use.

In this instance, not only are adults being told that their literacy score is inadequate, but they are receiving job advice and career counselling based only on the PDQ report. The ILT spin-off test in combination with the level implications is being used to suggest what sorts of jobs an adult may be qualified to do, and how their literacy may be an impediment. In both instances described, the report results needlessly subjugate learner aspirations.

In another instance, an educator was enthusiastic about the potential use of the report as a planning tool. "It spits out a report that can be used in a training plan," she said. "It can be slipped right in. It's amazing!" She is suggesting that the report results could be used to plan and organize subsequent learning activities in a literacy program. While in a

literacy program organized this way, learners would potentially have their employment aspirations lowered, and would focus on developing locating information skills.

Just as the ILT initiative was designed to warn politicians and policy-makers about the potential impacts of low literacy and compel them to address the concern, PDQ is designed to operate in the same way, inducing individuals to improve their literacy, but not any kind of literacy, only the literacy conceptualized and actualized by the ILT. Just as population testing is used as a policy motivator by the OECD to incite responses that address the over-arching policy interest—ensuring the development of workers for a ‘knowledge society’, the spin-off tests operate the same way for individuals.

The level implications are used to guide the development of subsequent policy devices and initiatives by Murray and others. The primary policy devices are 1) a trilogy of reports that outlines plans for a literacy education overhaul; 2) on-line mapping tools that are used to direct policy and public attention to those with a ‘literacy problem’; 3) learner profiles that are used to calculate a return on educational investment; and 4) a suite of instructional and assessment products for individual and program use that will supply the key components for any jurisdiction to overhaul their current adult literacy education system. Each of the devices will be examined in the next sections.

Influencing Policy: Report Trilogy

Within the report trilogy are key aspects of a plan to overhaul Canada’s approach to developing adult literacy education and training initiatives. The reports are the following:

- 1) *Learning literacy in Canada: Evidence from the international survey of reading skills* (Grenier, Jones, Strucker, Murray, Gervais & Brink, 2008) produced by Statistics Canada;
- 2) *Reading the future: Planning to meet Canada’s future literacy needs* (Murray, Jones,

Willms, Shillington, McCracken & Glickman, 2008) produced for the Canadian Council on Learning by DataAngel; and 3) *Addressing Canada's literacy challenge: A cost/benefit analysis* (Murray, McCracken, Willms, Jones, Shillington & Strucker, 2009) produced by DataAngel.

The first report, *Learning literacy in Canada: Evidence from the International Survey of Reading Skills* documents a process of retesting adults at ILT Levels 1 and 2 in order to determine how they used “print-based component skills” including decoding, spelling and vocabulary. The retesting was carried out in the US and Canada. The report’s authors justified their decision to focus on these skills alone because they are learned *before* meaning-making abilities:

The ISRS has focused on the components of reading that are the most important for adults in IALSS Levels 1 and 2 to master in order to progress to Level 3 and beyond; that is, the print components and basic vocabulary (Grenier et al., 2008, p. 41).

Based on how well adults performed on the series of print-based component tests they were divided into groups. The US report (cf. Strucker, Yamamoto, & Kirsch, 2007) divides adults into five groups. The Canadian report creates six slightly different groups. Both projects employ a statistical procedure called latent class analysis to guide the categorization work. The Canadian report refers to this work as a segmentation analysis. During a keynote presentation that I attended, Scott Murray explained the purpose of the research: “Our hypothesis was that a lot of people with low skills would have discernible deficits in component reading skills, and this chart tells us that we were right.” He explained the meaning of the chart on an accompanying slide. Literacy is a “hierarchy of

skill acquisition and skill application.” On the IALS scale, he said, it’s all about decoding up to 225, after that it’s all cognitive. The 225 score, as noted on the slide, marks the transition from “learning to read to reading to learn”. He explained further, “Literacy is complicated. It took 25 years to learn to measure it. It’s all about learning to read and reading to learn,” he repeated. Until now “we haven’t been helpful to practitioners because Levels 1 and 2 have not been explained in instructional terms.” What Murray is saying is that the IALS and supplemental component reading tests provide the only way to recognize literacy, and that as a result of the ILT initiative, literacy has been actualized and operationalized, not just for measurement purposes, but also for instruction.

The second report *Reading the future: Planning to meet Canada’s future literacy needs* is designed to impel readers to become concerned about literacy, using future projections of literacy levels. It also directs concern towards certain groups using a profiling device. To profile Canadian adults a combination of demographic information (i.e. first language, presence of a reading disability, employment status, income, family information and education attainment) is related to the component test scores. We read, for example, that those categorized into one of the groups produced by the ISRS segmentation analysis are English-speaking males with a high school education, well-educated immigrant women and Aboriginal Peoples whose first language is not English. In the final part of the report, instructional approaches, including instructional hours, the focus of instruction, and suggested assessment tools for each ‘market segment’ were developed in consultation, state the report writers, with literacy educators. A consultant who had some insight into the process said the literacy educators who participated in the project “didn’t have a clue” how their input was going to be used in the report.

The third report, *Addressing Canada's literacy challenge: A cost/benefit analysis* was also produced by DataAngel, but was not commissioned by a government body or non-governmental organization. The report describes a detailed analysis of the costs and benefits, designed to guide an overhaul and reorganization of literacy education. It includes the cost for raising each 'market segment' to Level 3, and articulates ways to ensure the greatest "return on investment." In other words, the report defines which groups of people are most likely to get to Level 3 at the lowest cost.

Critiques of the Reports

The report trilogy was the focus of intense and organized criticism by adult literacy educators, researchers and advocates (cf. Darville, 2009a; Literacies Special Bulletin, 2008; Literacies Special Bulletin Report, 2008). The reports were faulted for ignoring practitioners and their knowledge of what it takes to develop literacy; for being xenophobic and focusing unwarranted and poorly informed attention on immigrants; and for attempting to design broad program policies based only on a few decoding tests that fail to address the myriad of learning considerations involved in pedagogical work.

The reports, and the tests used to inform them, are not actually aligned to "how people construe reading" and "how practitioners actually teach" (Darville, 2009a, p. 65). They "are strikingly insensitive to, even dismissive of, knowledge grounded in practice" (ibid.). They ignore fundamental understandings about the ways adults read and learn. "It is shocking," writes a literacy researcher "that *Reading the Future* provides program recommendations and strategies for literacy students, based on an assessment battery that did not assess an individual's ability to read and comprehend text" (Campbell, 2008, p. 2), since no actual texts were read.

In addition to ignoring reading research, the reports were produced without any input from experts who develop adult learning initiatives, and the educators who work in those programs. One critique warns of the dire consequences of disregarding field expertise and knowledge.

Policy-makers can't afford to ignore what the field knows. The only basis for solid, effective programming is sound pedagogy that takes account of students' life circumstances. Practitioners and learners from coast to coast to coast know what type of policy does, and does not, support effective adult literacy. Any initiative that ignores what the field knows is bound to fail (Atkinson, 2008, p. 11).

The reports have implications that reach beyond the field of adult literacy education. They are, state Jackson (2008), a “socially divisive line of thinking that can easily be misunderstood and encourage bigotry and racism” (p. 8). The reports, she writes, disregard key fundamentals about immigration, and target immigrants as “a problem.” They fail to acknowledge how new immigrants have higher levels of formal education than the Canadian-born population. Further, the reports fail to distinguish between literacy and language proficiency, insinuating that immigrants are somehow lacking in overall ability rather than simply needing time²³ to gain language skills. Finally, writes Jackson, the reports do not account for the impact of lost proficiency levels when highly

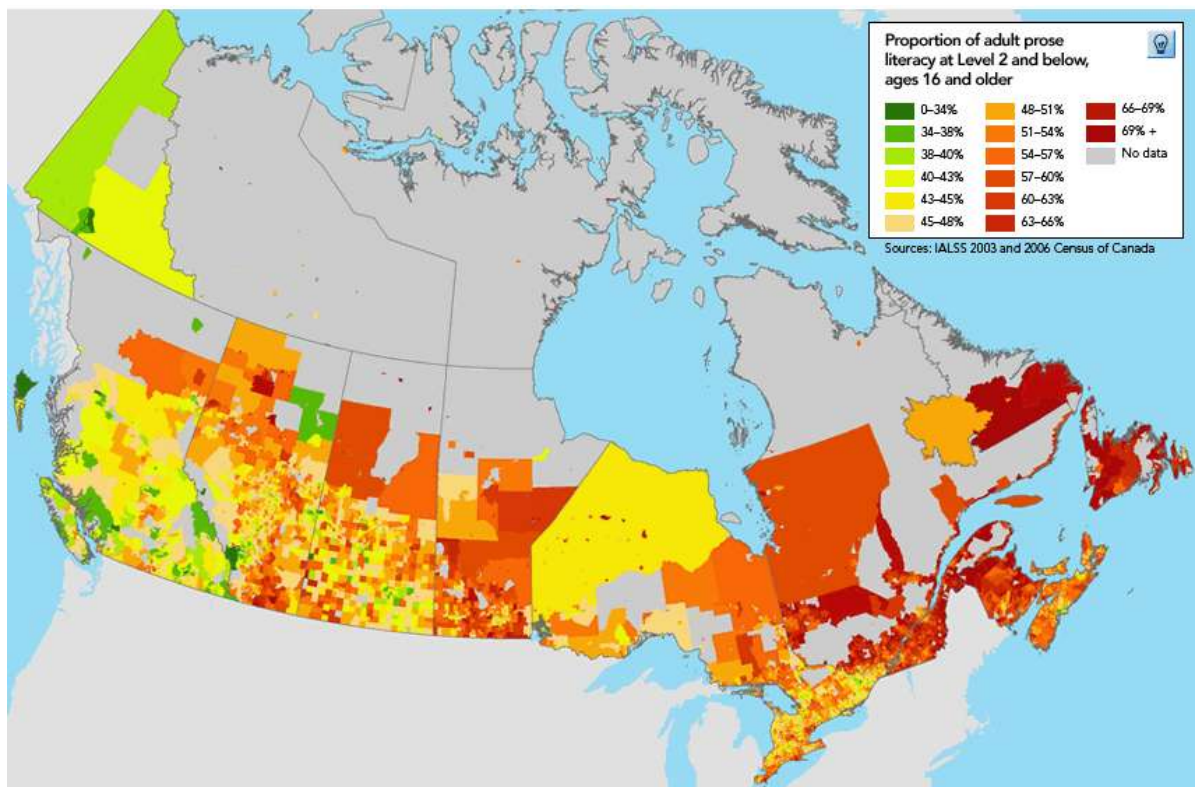
²³ The ILT initiative in general fails to adequately account for language gains since it tests only at one point in time. A longitudinal sample would likely reveal literacy proficiency gains amongst immigrants and other groups (cf. Reder, 2012).

educated and skilled immigrants languish in low-skilled jobs. This critique was only focused on the reports, and not the related devices, namely a set of interactive literacy maps and the promotion of the market segmentation analysis to provincial education policy-makers. Jackson's predictions about the social divisiveness and potential prejudice produced by the reports are realized with these devices.

Interactive Map: A Policy Persuasion Device

Developed by the now defunct Canadian Council on Learning (CCL) and released to coincide with International Literacy Day in 2008 is an on-line literacy mapping device (Figure 9).

Figure 9: Interactive Map Screen Shot



Like a map of mining deposits, agricultural or forestry resources, the on-line mapping device portrays ILT results for hundreds of communities and jurisdictions across the country (Canadian Council on Learning, n.d.). The user of the device is directed to click on a section and match the colour in the legend to find out the percentage of people at prose Level 2 in towns, cities and neighbourhoods across Canada. The colours used in the legend on the map mimic a stop light (albeit presented in reverse order): red at the *bottom*, followed by gradients of orange, yellow, and then green at the top. The green percentages at the top indicate that a particular region has the lowest percentage at Level 2 or below; red indicates the largest proportion of adults at Level 2 or below. Another version of the mapping device demarcates economic regions across the country. One can instantly see, states the web-site, which region has a large proportion of people “with poor literacy skills” who will find it “hard to conquer challenges such as learning new job skills.” The stoplight colours suggest that green regions are good and ready to go, if one was perhaps thinking of setting up a business; whereas red suggests there could be a problem, and one should stop and possibly reconsider. Of the three red regions, two are predominantly French-speaking (northern New Brunswick and central Quebec) and one is the south shore of Newfoundland, economically decimated by the closure of off shore fishing in the early 1990s. Such a visual display of difference and disparity actualizes what is *de facto* socially divisive thinking.

On their website, which can still be accessed (http://www.ccl-cca.ca/cclflash/proseliteracy/map_canada_e.html) CCL provides an explanation of the implications of being categorized into prose Level 2, replicating the level implications statements.²⁴

A Level 2 on the prose literacy scale denotes someone who is able to deal with simple, straightforward material, but their poor literacy makes it hard to conquer challenges such as learning new job skills (Canadian Council on Learning, n.d.).

A media release promoting the device was picked up by the CBC, and an on-line article describes the map and literacy concerns that were raised by the organization (cf. CBC News, 2009). Over 250 comments were originally posted. I sorted the comments into four groups. The largest number of comments was from people who agreed that literacy is a problem and blamed the school system or increased technology use, and advocated for a return to phonics, grammar and standardized testing. Although any discussion of literacy can turn into to a debate about the inadequacies of the education system, in this instance, a federally funded device elicited negative and antagonistic comments about provincially funded education systems. The next highest number of comments was from

²⁴ CCL also misconceptualises the prose domain devised for testing. Rather than a category that is used to organize test tasks, it is reformulated to being an ubiquitous literacy ability.

Prose literacy is an essential part of what many people consider “basic literacy,” and as such it is instrumental to developing a more sophisticated set of literacy skills (ibid.).

those who expressed disagreement and doubt about the statistics, often because they were personally insulted, suggesting there was something wrong with the methods. Next, were comments from people who were perplexed by the map itself, and how to interpret it. Comments in the fourth group, although not as numerous as the above comments, demonstrate how the map and interactions with the map makes socially divisive thinking happen.²⁵ The comments make an explicit reference to the use of the map, and are then followed by denigrating comments.

I just refreshed my browser and I can see the detailed data for Toronto - WOW some of the numbers for the GTA are really appalling! In some areas over 70% of the population is at 2 or below! No doubt this reflects the high number of immigrants who do not speak English or have very poor English skills. This can't bode very well for our future!

One commentator makes a distinction between immigrants in general and those who are refugees, suggesting they are the ones whose skills are not proficient.

Quite a shocking revelation [sic] to see 48% of the population are below the minimum threshold of literacy. What % comes from Refugees?

Another commentator blames immigration policies for the low proficiency levels, and demonstrates how the IALS is misinterpreted to mean that people can't read and write.

²⁵ I have reused Jackson's (2008) term "socially divisive thinking", which appeared in the critique of the report trilogy. The statement that the map makes socially divisive thinking happen and similar use of the notion that textual coordination makes 'things' happen is also hers (cf. Jackson, 1995).

Went to the website to see the map; clearly unfettered liberal immigration policies that neglected the requirement to be “functionally literate” in either official language are the cause of such high numbers of illiterate people living in Canada.

Finally, after viewing the map, one commentator directs derogatory remarks at people living in Quebec and the Atlantic provinces:

I couldn't help but notice, the majority of people with low literacy were from Quebec, and the Atlantic provinces...I am starting to think that our transfer payments aren't giving us any benefits, how can we stop them, so that the money is no longer squandered? As I think this is a prime example of how a have not, will not!

Indeed, many comments accompanying on-line articles are steeped in prejudice and bigotry. However, the point I am making is to show how a particular device, a device developed with government funding, can elicit such comments. It is some comfort to also see that a far greater number of comments were directed at the operation and meaning of the device, including astute comments that questioned its underpinning methods and use of data. Not one comment indicated that the device could be used for useful or productive purposes.

Profiling Learners and Appraising Educational Efforts

To gain a full understanding of the potential impacts and repercussions of the segmentation analysis I compiled the key elements into the table below. The table synthesizes efforts of policy entrepreneurs to attempt to influence policy-makers to move people to Level 3. All the information in the table can be traced back to the report trilogy. Information about the development of the four latent classes and their relationship to ILT

levels in columns one and two can be found in the ISRS report (i.e. Grenier, et al., 2008).

The third and fourth columns are primarily based on information from the *Reading the future* report (Murray, et al., 2008). The final column contains information derived from the *Cost/benefit analysis* report (Murray, et al., 2009).

Table 19: Key Aspects of the Segmentation Analysis

Latent Classes	ILT Levels	Learner Characteristics	Labour Market Shortage	Cost to Reach Level 3
A - Moderate vocabulary but poor decoding skills	Low Level 1 (A1)	Male, first language English, high school dropouts with learning disabilities	6%	\$ 2877.92
	Mid Level 1 (A2)	Immigrant women with little education and Aboriginals, first language not English	8%	\$ 3020.42
B - Moderate vocabulary and moderate decoding skills	Low Level 2 (B1)	Male, first language English, high school only, no PSE	3%	\$ 2635.04
	Low Level 2 (B2)	Educated immigrant women and Aboriginals, first language not English	4%	\$ 2777.50
C - High vocabulary knowledge and moderate decoding skills	Mid Level 2 (C1)	Canadian-born, first language English, PSE, employed	29%	\$ 340.63
D - High vocabulary and high decoding skills	High Level 2 (C2)	Canadian-born, first language English, PSE, employed	31%	\$ 228.92

The *Cost/benefit analysis* report outlines the financial cost of increasing the literacy levels of nearly half the population from Levels 1 and 2 to the ‘suitable minimum’—Level 3. Although the overall cost will be over \$6 billion, the report authors argue that the rates of return for individuals and the nation will far out-weigh the initial investment. Part of the overall financial analysis is a breakdown of instructional costs according to the segmentation groups. Learners in the A and B groups—adults with a learning disability, immigrant women and aboriginal adults—will be the most costly. Those in the C and D groups—Canadian-born, post-secondary educated, employed adults—have the lowest price tag. In order to achieve the goal of moving everyone to Level 3, state the authors, educators will have to “match their program offering to the diverse needs of learners” (Murray, et al., 2009, p. 3). Currently, state the authors, the “Canadian literacy market is seriously inefficient” (ibid.). These inefficiencies, according to Murray in a keynote presentation, are the result of half of the population’s ignorance; adults are unable to judge their own literacy abilities, or foresee potential benefits to an increase in literacy proficiency. In addition, according to report authors, the literacy “product”, that is the current teaching and program organization, is not “well-matched to learners [sic] needs and characteristics”, nor is it of “sufficient quality” (ibid.).

It is Canadian-born adults, with levels of literacy equated to a post-secondary education who are *already* working, who are deemed to be most ‘efficient’ to educate. Those who are not ‘efficient’ are immigrants, and specifically immigrant women, parents (usually women) in family literacy programs, men with learning disabilities and Aboriginal Peoples. According to Murray, while speaking during the same keynote address, the first group (latent class A) is “dominated by high school drop-out men.” They are the “I

bumped my head men,” he said. Also at the “lower levels” is a second group of men who graduated from high school, but did not go on to post-secondary education. According to the analysis, they are in jobs that “don’t demand high literacy” skills. The adults who have been grouped at IALS Level 2 have “problems decoding and [with] comprehension.” Then, there are two groups of immigrant women, he explained—uneducated and educated. “They are important because historically they have been denied access to federal language and literacy training programs. The fact that they don’t have skills is an artefact of public policy.” (His comments are baffling, considering there has been two decades of federal funding for language programs, including funding for childcare for parents attending those programs.) He later stated that providing literacy instruction to women who are immigrants is prohibitively expensive. When describing the adults categorized into latent classes C and D, he said, “29% haven’t mastered the mechanics, but have boats and cottages; 31% have mastered the mechanics but can’t move up a level.” In these levels, he explained, almost all adults are employed, almost all don’t like computers, and 40% have kids. But if “you” (comments are directed at an audience of educators) only offer family literacy, you won’t “reach where the problem is.” He explained that the latent class D group, people who do not have problems with the “mechanics of reading”, can’t get to Level 3. The reason he said is that they need to learn how to use “conditional information to make inferences from complicated text.” What he is referring to is the level implications statement for Level 3: “Like higher levels, it requires the ability to integrate several sources of information and solve more complex problems” (Organization for Economic Cooperation and Development and Statistics Canada, 2000, p. ix). And if they are not able to use “conditional information to make

inferences from complicated text”, while on the job, they “will not be able to make decisions very easily if the inputs are based on reading what the problem is.”

The segmentation analysis has led to a series of supplemental analyses for each province (cf. Murray & Shillington, 2010), and an additional analysis for Aboriginal Peoples (cf. Murray & Shillington, 2011). An overview of the segmentation analysis produced for one province is currently available on-line as part of an initiative to promote the work directly to educators and policy-makers in each province and territory. When speaking to an audience of Nova Scotia educators and policy-makers, Murray urged the audience to shift funding away from current programs towards new programs and initiatives that target adults categorized into higher levels who are already working and have completed a post-secondary education.

I know some of where Nova Scotia spends its dollars on literacy. I think it’s fair to say that it’s almost all on the traditional literacy segments—the illiterates: A1, A2, B1, B2. It isn’t on those CDEs and Fs²⁶. If you look at the rates of return, because the costs are so high of where you’ve been spending your money, for those A1s, the men that bumped their head in the night, you’re only going to get a 189% return. Still positive, but compared to the rate of return on the Es and Fs—that’s over 1000%! If it were your money, and your small business, we know

26 The original four latent classes have been extended in the segmentation analysis. The E and F groups are adults already at Levels 3 and 4, but, according to the analysis, need to move to Levels 4 and 5 to ensure economic productivity. Most of these adults would have a post-secondary education, including university and advanced degrees.

where [name of person]²⁷ would be investing his money. The question is, no, the statement is—it makes economic sense (Murray, 2009, May 6).

During both the on-line presentation and the keynote presentation that I attended, Murray said the segmentation analysis describes “the nature of the problems and how you have to adjust your programs.” He added with enthusiasm, “We have to improve efficiency. We have to turn literacy instructors into small business people; to look at supply and demand.” He then explained to an audience of educators how they should use the segmentation analysis:

If literacy was your small business, and you have to think about where you are going to sell your services, these are your market segments.

This is who you can go after and this is who your products and services have to be targeted to.

In the presentation I attended, a series of slides were used to show us which occupations should be the target of literacy ‘services’. They were mostly female dominated occupations—nursing, teaching and childcare professions. After the presentation, one person asked how she could target instruction for nurses. While the presentations may seem, extreme, nonsensical, and completely baffling, they do have influence, as does the presenter. All of the policy persuasion projects have received funding, primarily from the

27 The parentheses are used where Murray addressed an audience member by name. Based on the context of the remarks, the individual was likely a provincial policy-maker with responsibilities related to the literacy education budget.

federal government, either directly through the Office of Literacy and Essential Skills or indirectly through national organizations such as the Canadian Council on Learning.

Taking Action with *TOWES Prime*

Perhaps frustrated with a lacklustre response by policy-makers and politicians, Murray's (and others') efforts to alter adult literacy education have shifted from convincing policy-makers to make changes to making their own changes. In a second keynote presentation that I attended, Murray announced: "After 35 years of trying to convince bureaucrats of what to do, I've now turned my focus to working from the bottom-up, and working on instruction." The keynote was part of a one-day workshop for educators. The title of the presentation was *Controlling Complexity: The Key to Competing in Global Markets*. The keynote speaker explained that in order "to be competitive" we need to create the 'right' assessment and instructional tools. What was then described is a set of instructional, assessment and accountability devices.

Our goal here in building these tools is to make them available at a low price. It should change the way the world is organized from an instructional point of view...It turns the instructor from an instructor to a conductor.

He then added, "We are doing this with a barrel-full of money from OLES."

The following section highlights the project. The information is based on an examination of a variety of sources, including my participation in a two-day workshop led by the main developer of the on-line instructional system.

*TOWES Prime: On-line Assessment and Instruction*²⁸ is a highly ambitious project currently underway at Bow Valley College, and beginning in 2010. The intention, according to the project description that appears in an OLES funding overview²⁹ “is to help address the deficiency and inadequacy of current assessment instruments for low literacy adults.” In addition, it “will enable the design and delivery of more targeted and responsive literacy interventions.” Working in partnership, according to a web-site description, are the following organizations: DataAngel Policy Research, run by Murray; Polymetrika Inc., run by a psychometrician who worked on the IALS and ALLSS surveys, and a spin-off test; and Performance by Design, run by a psycho-educational assessment developer and former student of one of the main ILT test developers, Peter Mosenthal. Their combined expertise is being used to develop, and eventually widely market across Canada and internationally (Association of Canadian Community Colleges, 2013, February 27) “a suite” of assessment and instructional products. Three of the four

28 The project has gone through a few name changes. It was initially called the Learning to Read Assessment Battery in a funding overview received upon request from OLES, and then called Read to Succeed when it was first promoted on-line. Also, TOWES Prime was initially the instructional component, and TOWES Scaffold was previously the name of an assessment. Currently, the instructional component is called TOWES Scaffold.

29 Based on a funding overview that I received from OLES, the project (called the Learning to Read Assessment Battery) received \$1,394,266 for three years (February 2, 2010-February 2, 2013). To date, no final products have been released.

products are assessments, and one is an on-line instructional system. Based on web-site descriptions, *TOWES Focus* and *Sharp* likely operate in similar ways to other ILT spin-offs. *TOWES Foundation* is a unique assessment and *TOWES Scaffold* is the instructional component. After a brief overview of each component I will describe *TOWES Scaffold* in greater detail, as it activates regulatory processes of item response theory and the locating information model.

TOWES Focus is a candidate for the Ontario literacy system's 'learner gains' measure. Focus is promoted as a tool that will "enable efficient instructional groupings". It will be "well suited to organizational or system accountability reporting" (Read to Succeed Project Primer, n.d., p. 2). It will also provide "learner gain" information, and is intended to be used with learners when they enter and exit a program. It is designed specifically for "adults participating in recognized literacy programming" (ibid.). *TOWES Sharp* is a "high-stakes assessment tool" that will provide a score using the ILT 500-point scoring system. Until now, ILT spin-off tests (i.e. PDQ, TOWES and Education and Skills Online) have only provided a level, never a specific score.

The third assessment *TOWES Foundation* is unique. It is promoted as a "diagnostic tool" for ILT Levels 1 and 2 that "classifies individuals into homogeneous groups" (Read to Succeed Project Primer, n.d., p. 1) using the combination of decoding and vocabulary tests used in the ISRS and "market segmentation analyses conducted by DataAngel Policy Research Inc." (ibid.). This could mean that the device will produce some or all of the aspects of the segmentation analysis and profiling work. As a diagnostic tool that operates in such a way, it may not be intended for program use, but for use by government departments such as social services, and employment and training services.

TOWES Scaffold is an online instructional system, not simply a set of strategies that an educator would integrate into teaching and learning work. It is designed to operate as a stand-alone teaching and learning system that will “move learners from Level 2 to 3” (p. 1). The intent is to provide approximately 30 hours of instruction (Association of Canadian Community Colleges, 2013, February 27).

TOWES Scaffold Overview: Using Item Response Theory for Instruction

TOWES Scaffold is promoted as an instructional system that is the “first in the world to embody the same theoretical framework that is used to drive assessment” (Read to Succeed Project Primer, p. 7). What is being produced is a novel and distinct approach to literacy instruction. It is a new literacy pedagogy that is being built on the underlying methodological principles and procedures of ILT test development. The new pedagogy reaches well beyond the use of level descriptions to organize learning, and the use of the apparent features of ILT test tasks, which was the approach of the OALCF. Regulating principles of item response theory are the foundation of the system. Such an approach was first described by one of the main ILT test developers, Peter Mosenthal who wrote that IRT provides “an important conceptual basis for designing a computer adaptive testing and instructional program” (Mosenthal, 1998, 273). A former student of Mosenthal’s, Michael Hardt, explained that he was actively involved in finding a way to build an instructional system guided by IRT principles. He described this work in the workshop that I attended and referenced the above article as the basis of the work.

Although the workshop focused on a different but related topic, some information about *TOWES Scaffold* was shared in a handout. I couldn’t make much sense of the handout until I had analysed the role of IRT in the development of test tasks. The handout is

comprised of a schematic plan for the system on one side and a model of learning on the other side. The learning system is comprised of a series of learning tasks that operate like individual test tasks. Similar to the testing system, the learning system is not concerned with individual literacy skill development and individual abilities. Individual responses merely trigger positioning within the model in an appropriate learning “zone” where they are likely able to respond to a learning task, and then proceed to respond to incrementally more difficult tasks, as determined by the system.

A Model of Literacy Learning: The Periodic Table of Learning. Both the ILT and TOWES Scaffold are constructed using an item response model. The item response model for the ILT, initially described in Chapter 4 is reproduced in the figure below (Mosenthal, 1998, p. 271). The three item response parameters used to regulate modelling work and produce proficiency scores for a population are 1) test task difficulty, 2) the likelihood of guessing, and 3) the proportion of test-takers who provide a correct response. The item response model in *TOWES Scaffold* is called the *Periodic Table of Learning* and sub-titled *The Mosenthal Taxonomy*. It is copyrighted by Performance by Design so I will only describe it. The learning and instructional model also has three parameters. The three parameters are derived directly from the ILT scoring system: 1) type of requested information, 2) type of processing and 3) type of match. The general shape and organization of the *Periodic Table of Learning* is also represented in the figure below, which displays both models for comparison.

Figure 10: The Item Response Model and Literacy Learning Model

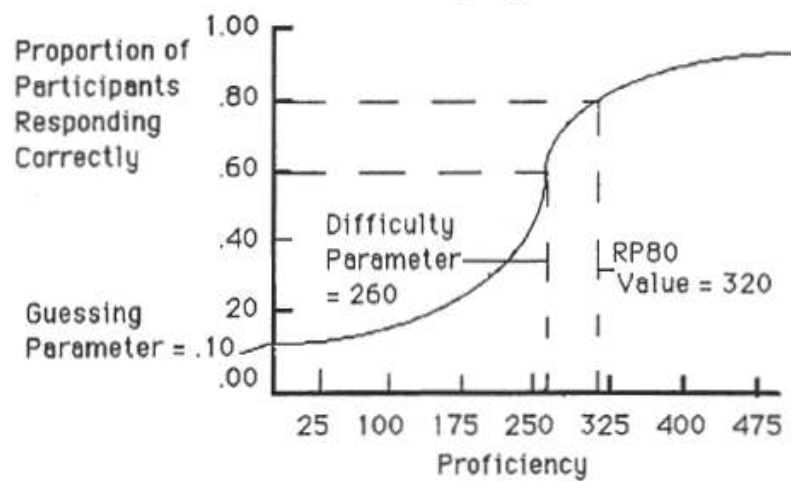
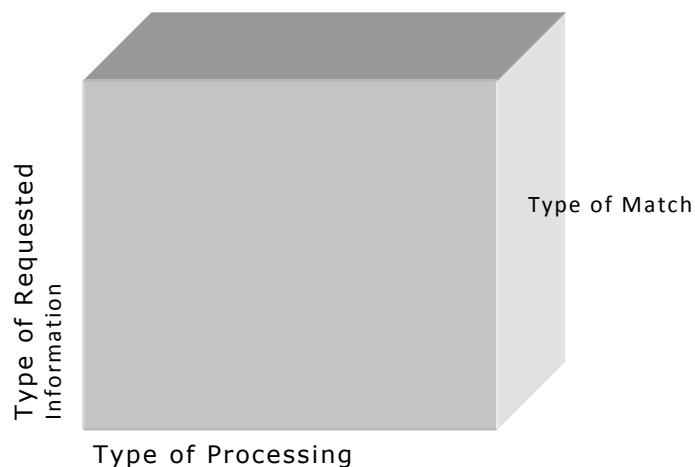


Figure 1. The three-parameter IRT model



Rather than being two-dimensional, *The Periodic Table of Learning* is three-dimensional. The three scoring categories are used to regulate the development of a series of learning tasks, including their difficulty. The actual table has grid lines to represent how each of the learning parameters or scoring categories is integrated to guide the development of learning tasks. Completion of the tasks is used as the primary indicator of literacy development. Similar to the test task development process, learning tasks are ordered according to difficulty. Unlike the tests however, they are not scaled the same way.

Instead learning tasks are arranged in “zones” of difficulty in what is called a “scaffolding” process. Similar to the way that test developers co-opt sociocultural understandings of literacy, the learning system developers co-opt and distort Vygotsky’s concept of the zone of proximal development to describe how the learning tasks are assembled. However, unlike Vygotsky’s concept, in which scaffolding is dependent on the interaction of the learner with new knowledge, educators, peers, resources and knowledgeable others, scaffolding in this system is entirely regulated by the model and its parameters.

Two of the learning task parameters—the type of requested information and type of match—are directly related to the similarly named ILT scoring categories. The table below compares the type of information scoring protocol with the learning task indicators used in the *Periodic Table of Learning*.

Table 20: ILT Scoring Sub-Categories and Learning Task Indicators

ILT Scoring Type of Information (Mosenthal, 1998, p. 284-285)		Periodic Table of Learning Type of Requested Information	
Identification of persons, groups, animals, places and things (as a noun)	Score 1	Zone 1	Nouns Person, animal, thing, place
Amounts, times, attributes, types (or kinds, actions, locations, groups and procedures)	Score 2	Zone 2	Actions & Qualifiers Location, action, attribute, amount type
Identification of manner, goal, purpose (or function), alternative, attempt, condition, sequence, pronominal reference, verification, predicate adjective, assertion and problem	Score 3	Zone 3	Action Qualifiers Manner, sequence, purpose/function
		Zone 4	Status Conditions Condition (goal, problem, solution), criteria, parts/whole
Cause, effect (or outcome, results) evidence (or justification), similarity, pattern, opinion and explanation	Score 4	Zone 5	Relational Conditions Cause/effect, assertion/evidence, reason/outcome, similarity/difference

Identification of equivalent, difference, and theme	Score 5	Zone 6	Generalized Conditions Goal set-up, main idea/theme/lesson, pattern/predict, process/procedure, equivalent, indeterminate
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The type of match category also operates in similar ways when developing test tasks and learning tasks. The category is used to guide the development of test/learning tasks that require an individual to locate, cycle, integrate, and generate a connection between the printed text and the question.

The third category, type of processing, is extended from the original scoring protocol (i.e. number of phrases, number of responses, inferences) in order to incorporate various types of reading comprehension questions that are commonly used when writing test questions in the K-12 education system. The reformulated sub-categories for types of processing are the following: identify, sort, define/describe, narrate, summarize, compare/contrast, explain, justify and persuade. The reformulation of this category means that the instructional model establishes a limited connection between the locating information processing model devised for the ILT and the distinctly different reading comprehension model used in K-12 education.

The *Periodic Table of Learning* operates as a location index of difficulty for task development and for learner placement and evaluation of current literacy abilities. A learner would be placed into one of the “zones” when responding to tasks, and then be given tasks that were incrementally more complex that elicit the thinking and response processes related to the scoring categories. In essence, the instructional system is comprised of a series of mini tests; testing and instruction are fused in each task.

On the reverse side of the document that I received during the workshop is a schematic of the actual tasks that would be developed for the learning system. The schematic was described as the “architecture for the current TOWES system.” On the drawing are four categories of tasks: using documents, reading, creating documents and writing. There is no reference to numeracy. Three of the four categories use graphical elements supported by some descriptors to represent the increasing difficulty of tasks. For example, the category “using documents” displays a series of more complex tables with the following descriptors: simple, combined, nested and intersected tables. The terms correspond directly to the scoring protocols used for documents in the ILT.

The reading tasks are represented using only words to show how each of the sub-categories on the *Periodic Table of Learning* will be incorporated in the development of the reading tasks. The table below is an excerpt of the first half of the tasks represented by zones 1-3 out of a total of six zones. There is no indication of the kind of text that would be used to construct the task. Similar to the ILT, the actual text—its content, topics, complexity, meaning and relevance—is secondary to the primary operation of the scoring protocols and processing of textual information. Further, there is no indication that linguistic skills and abilities are addressed. Using IRT principles to build the system also means that the skills and abilities of the individual are secondary to the relationship of the parameters in establishing learning task difficulty within the model.

Table 21: Example of Learning Task Question/Answer Process

Requested Information		Type of Match	Type of Processing
Zone 1	Nouns Person, animal, thing, place	Locate	Identify
			Sort
Zone 2	Actions & Qualifiers Location, action, attribute, amount type	Cycle	Define/Describe
			Narrate
Zone 3	Action Qualifiers Manner, sequence, purpose/function		

In describing the work during his keynote, Murray said enthusiastically,

In your instructional practice you won't have to think too much about what to do. The tool will be built to do everything. The system will be smart enough to say what you need, what you can teach.

He added that he “has a self-interest” in the financial part of the project: “[Name of director of marketing and development for TOWES at Bow Valley College] and I have a deal to market this to other countries. We will make the tool available to large numbers of programs and people.”

On one hand, *TOWES Scaffold* is similar to any other on-line instructional system. It is a developmental learning system designed to operate independently of instructor support so a learner is able to directly access the learning activities, and progress through the system independently. However, the numerous differences between *TOWES Scaffold* and other on-line and software systems make it a very distinct system. Usually, on-line instructional systems are closely tied to a jurisdiction’s curriculum, and are designed to complement the curriculum in use. They are often used as a way to supplement, extend or support the primary curriculum. *TOWES Scaffold* was not designed to connect with an existing

curriculum and operates independently of a jurisdiction's curricular approach. The disconnection also applies to work-based learning systems. More common in the US are employment preparation systems that are used to help learners prepare for employment tests. Again, *TOWES Scaffold* was not designed to support such a connection. The learning system is distinct from similar on-line systems, existing curriculum and curricular approaches in Canadian literacy programs and work-based learning systems. Further, its pedagogy, based on the locating information model and a scaffolding model derived from item response theory is novel. The unique instructional approach has never been evaluated or reviewed by adult learning and literacy development experts. It's likely that very few people are even aware of the system's pedagogy, since it is so unique, and has never been fully described. Not only is *TOWES Scaffold* not designed to connect with other curricular systems and learning approaches, but the related aspects (i.e. assessments and a 'diagnostic' test that profiles adults) indicate that *TOWES Prime* is designed as a stand-alone curricular, managerial and accountability system that any jurisdiction could purchase. Similar to the ILT itself, it is designed to operate across cultures and communities, which means the learning tasks will likely look and feel similar to ILT test tasks and various other test tasks that emulate the ILT model.

The project has fundamental contradictions that should be of concern to federal government funders. It is developing on-line training services and program delivery, a provincial responsibility. As a stand-alone instructional system it constitutes program delivery and training. Further, the project does not complement current curricular systems but operates independently. It has not been evaluated for its educational fit and effectiveness. The aim, to move adults from high Level 2 to Level 3, contradicts adult

training and labour development initiatives directed at supporting individuals who are not working or in training programs. Finally, the government is funding a for-profit organization to develop and sell their products internationally.

Demonstration Studies

In the 2009-2010 fiscal year two research projects received substantial funding from OLES to devise studies to demonstrate how specific instructional interventions could be implemented to realize the desired Level 3 proficiency. The initial focus of both multi-year projects was to target interventions for those whose skills are at the mid to high range of Level 2. Social Research Demonstration Corporation (SRDC) received \$6.2 million to research the impact of increased ILT levels for approximately 800-1000 workers. The Association of Canadian Community Colleges (ACCC) received nearly \$5 million to devise an Essential Skills curriculum framework and implement different instructional approaches using the framework. Both projects involved the use of pre- and post- testing using TOWES, and the development of a curriculum based on the Essential Skills. SRDC used an instructional control group design. ACCC used an action-research and case study approach to assess the effectiveness of the instruction across several different college sites. SRDC also examined a broader set of indicators using a suite of measures including job performance measures, wage growth, job stability, satisfaction with work, participation and completion of other training, productivity or error rates, employee retention, and health and safety.

Although the ACCC project ended March 2013, a final research report was not available at the time of writing. The SRDC project will publish their final report May 2014.

Preliminary results have been released. Not anticipated, according to the lead researcher,

workers who tested at Levels 1 and low 2 showed the greatest improvements and greatest return on investment (Gyarmati, 2014, April). Contrary to the work of policy entrepreneurs, the study demonstrated the value of supporting those who test at the lowest levels.

Summary

The level implications were created to influence policy and serve as a set of regulating principles to guide the development of various policy-oriented initiatives aimed at inciting responses to the ILT results. They were not developed using empirical evidence or carefully considered technical interpretations about the operation of the test itself. An analysis reveals that they were devised based on an assumption of a connection between literacy proficiency and socio-economic variables, and a series of discursive manoeuvres. Test developers themselves have stated that test results do not support these implications. The level implications have been removed from reports related to PIAAC.

The implications statements are used as is, in concert with ILT data, and in broader extensions. They appear in curricular contexts but are more prevalent in policy contexts. They are incorporated into PDQ, resulting in a perverse suppression of learner employment goals and aspirations. Just as population testing is used as a policy motivator by the OECD to incite responses that address the over-arching policy interest—ensuring the development of workers for a ‘knowledge society’, the spin-off tests operate the same way for individuals. The results are used to impel them to improve their literacy abilities, but not any kind of ability, only the literacy conceptualized and actualized by the ILT. An on-line mapping tool provides a visual display of difference using the ILT data. Some

comments following a news article about the device demonstrate how the map and interactions with the map allows socially divisive thinking happen.

The most extensive efforts to induce change can be seen in the work of a small group of policy entrepreneurs, led by the former manager of the IALS and ALLS, Scott Murray, who want to overhaul what they perceive to be a “Canadian literacy market [that] is seriously inefficient” (Murray, et al., 2009, p.3). Actualizing the level implications in this work is a market segmentation analysis, which is used to profile Canadians according to test results, their gender, education, and first language. Aboriginal Peoples and immigrants are specifically profiled. Adults categorized into Levels 1 and 2 are then categorized into sub-groups for education ‘intervention’. Then a cost/benefit analysis is used to determine how much it will cost to move each sub-group to Level 3. Canadian-born adults with levels of literacy equated to a post-secondary education who are *already* working are deemed to be most ‘efficient’ to educate. Those who are not deemed to be ‘economically efficient’ are immigrants, and specifically immigrant women, parents (usually women) in family literacy programs, men with learning disabilities and Aboriginal Peoples. The segmentation analysis is repeated for provinces, territories and Aboriginal groups. It is then promoted directly to educators and literacy education policy-makers.

The policy entrepreneurs have shifted tactics. Rather than focusing on convincing policy-makers to make changes to adult literacy education, they are now focusing their efforts on making their own changes. The lead policy entrepreneur, Scott Murray stated, “After 35 years of trying to convince bureaucrats of what to do, I’ve now turned my focus to working from the bottom-up, and working on instruction.” The product, *TOWES Prime* is

designed as a stand-alone curricular, managerial and accountability system that any jurisdiction can purchase. According to Murray, an international deal has also been made. Aspects of the project contradict federal government policy, responsibilities and funding protocols. The instructional component, *TOWES Scaffold* is distinct from other on-line instructional systems, existing curriculum and curricular approaches in Canadian literacy programs and work-based learning systems. Further, its pedagogy, based on the locating information model and a scaffolding model derived from item response theory is novel. The unique instructional approach has never been evaluated or reviewed. Very few people are likely even aware of the system's pedagogy, since it has not been adequately described until now. Demonstration studies, although initially aimed at demonstrating the higher return on investment to move mid- and high Level 2s to Level 3, may begin to contradict the basic premise of the policy persuasion efforts.

8. Conclusion and Making Changes

The thesis explicates how and why an international testing initiative has devolved into program-level assessment and instruction, and demonstrates impacts on learners, workers, educators, and program coordinators. Their accounts in the context of program assessment, program development, and teaching and learning practices demonstrate that the intense effort to manage and monitor literacy learning using ILT derived assessments, learning objectives and learning materials suppresses and disregards the development of relevant and meaningful literacy practices that are responsive to the learning aims of adults. Further, some instances demonstrate that ILT derived policy directives are socially divisive and prejudicial. While the learning aims of adults may not be a concern in a “literacy regime”, organized to ensure the ‘quality’ of literacy resources for economic growth and international ‘competitiveness’, what this thesis also indicates is that the assessment, curricular and instructional tools devised to ‘enhance’ the literacy resource may not be all that useful.

ILT Devolved Assessments

When ILT derived assessments, and specifically the spin-off tests, are used in programs, learners encounter test tasks that may contradict individual knowledge and common practices with similar texts. They must suspend real-world sense-making abilities in order to respond correctly to test questions, as the tests are abstracted from day-to-day thought, action and ‘processing’. While such an abstraction is not uncommon in a testing situation, the spin-off tests are promoted as a more ‘authentic’ approach to testing because they use ‘real-world’ tasks. The test tasks, upon first glance, also look like something that a test – taker could encounter or should know something about. Their expectations are then

thwarted, and their ability to do the test depends on their ability to draw on a repertoire of test-taking strategies and knowledge under pressure. Further, in order to make some sense of the results, since the levels are novel, and the test does not inform students about specific reading skills, PDQ has incorporated level implications statements into its final report. The statements could suppress employment aspirations. One educator didn't allow her students to read the results.

Within the OALCF, depending on the level of formal education and accompanying test-taking experience and literacy abilities that a learner has, some will find the assessments too challenging, and others, paradoxically, will find them too easy. There are anecdotal indications that some learners are not able to complete the milestone assessments, including those with learning disabilities and mild developmental disabilities, Deaf learners and learners who have immigrated but have limited or no formal education. Ontario educators who don't see assessments and accompanying learning objectives that can be used for their learners with limited literacy abilities, worry that they will not be 'countable' in the system.

In all ILT derived testing situations, learners with limited literacy experiences are expected to draw on skills and expertise they don't yet have in order to show 'progress' and 'proficiency'. To prepare students to complete the mandated assessments in the OALCF task banks that mimic the assessments are being produced as learning activities. The task banks also support a reformulation of learning that occurs in programs. Spending this time preparing the students to complete the assessments takes time away from supporting the development of other literacy practices and processes, particularly those needed to access further education and training. Since the tests are not aligned with

school-based literacy learning approaches, the results are of little instructional use to educators.

In one instance, a spin-off test was used in a course to fulfill an accountability mandate, despite not having a curricular connection to the course content, leading to mixed results for the learners, and the need for the educator to attempt to explain the results. Another instance demonstrates that the use of the spin-off tests, seen to be too time-consuming and not relevant to the curriculum, could threaten the integrity of partnership development. The use of ILT devolved assessments in the context of adult education needs to be thoroughly evaluated.

ILT Devolved Curriculum Frameworks and Learning Objectives

While the Essential Skills and OALCF may provide a common language for policy-makers and those managing programs, their language proves to be uncommon for educators and learners. Educators struggle to find meaning in the abstracted skill list and related sets of learning objectives. They employ different strategies to make the learning categories and levels meaningful and relevant to their work, and devote valuable time to this effort. As the OALCF is implemented, an educator strategized whether or not she would teach students the language of competencies and task groups, recognizing it would take time and effort away from current learning activities and the language of the post-secondary system that students were preparing to enter. The language of both frameworks could also be a barrier to developing partnerships with employers and other educational institutions. Rather than focus on developing a training program for the employees, one program coordinator spends time on ‘educating’ the employers about the Essential Skills. The skills and expertise of a recently laid-off worker are reformulated and subsumed

when an Essential Skills checklist is used to gather background information in an educational counselling session. The process becomes a time-consuming impediment that provides little useful information for the educational counsellor or worker.

Curriculum developers who have become certified profilers, learning the general test task development methods of the ILT and task analysis methods of the Essential Skills, have become new “experts”. The expertise of other curriculum developers is marginalized in projects funded by the provincial and federal governments.

The majority of learners in Ontario programs want to access the secondary and post-secondary systems, and are in programs to develop academic literacy abilities aligned with their curricular approaches. The OALCF does not operate in the same way as the curricular approach that many programs currently use, which follows a similar reading comprehension model that is used in elementary and secondary schools. Spending time completing assessments and learning activities that are not aligned with the same curricular approach as the one being learned could impede attempts to access the secondary system. Demonstrating the curricular difference, and the potential impacts on programs, are responses to the OALCF by different literacy groups. Programs run by community colleges lobbied to ensure that their secondary school equivalency curriculum remained intact in the performance management framework, leading to a series of inequitable PMF measures that privilege college programs. School board curriculum developers produced extensive support documentation to “fill in the gaps” and rework the OALCF so an alignment with the K-12 system could be made. Curriculum developers representing Francophone programs arranged to be trained as certified Essential Skills profilers so they would be able to better understand the new provincial curricular

arrangement and its impacts on their current program approaches. Overall, educators in community-based and school board programs, more so than college educators, have to devote scarce time and resources to accommodate the OALCF. They must also spend more time preparing their learners, generally with less formal education than learners in the college programs, to do the assessments, taking time away from meaningful, relevant and purposeful learning and program coordination activities. It is an inefficient use of their time and expertise, and demonstrates an inequitable distribution of the impacts of the OALCF.

ILT Devolved Instruction

An attempt to ‘share’ some of the strategies and methods learned by certified Essential Skills profilers with educators removes the learner from the teaching and learning dynamic. Such an approach contradicts fundamental adult learning principles to build on learners’ experiences, and connect those experiences to personally meaningful learning. Ontario educators are also learning a literacy task analysis strategy, used to recognize and formulate learning as a ‘task-based’ accomplishment. Although the strategy is promoted as ‘authentic’ learning, educators find the strategy confusing and cumbersome. There is no mention of supporting educators in using actual materials and documents that learners encounter in their lives as part of their instructional approach.

Overhauling Programs and Policy Persuasion

Policy-persuasion devices and related tactics are directed primarily at policy-makers. There are indications that the devices and people developing and promoting particular policy related devices are having an impact. A consultant informed me that Scott Murray had spoken to Ontario provincial policy-makers to convince them their new curriculum

had to be aligned with the ILT and Essential Skills. He and an entrepreneurial partner then entered into a contractual arrangement with the province to develop an assessment to measure ‘learner gains’ for the literacy system. Although the assessment was field-tested over a year ago, a ‘learner gains’ test had not been chosen at the time of writing.

A policy persuasion device that ‘profiles’ adults using a ‘segmentation analysis’ based on the supposed cost to move them to Level 3 is prejudicial and socially divisive, and could be used to severely limit access to learning opportunities. Canadian-born adults with levels of literacy equated to a post-secondary education who are *already* working are deemed to be most ‘efficient’ to educate. Those who are not deemed to be ‘economically efficient’ are immigrants, and specifically immigrant women, parents (usually women) in family literacy programs, men with learning disabilities and Aboriginal Peoples. The ‘segmentation analysis’ was repeated for provinces, territories and Aboriginal groups. It has been promoted directly to educators and literacy education policy-makers. The policy entrepreneurs have recently shifted tactics. Rather than focusing on convincing policy-makers to make changes to adult literacy education, they are now focusing their efforts on making their own changes using *TOWES Prime*, a comprehensive collection of assessment, instructional and accountability tools that will be marketed in Canada and internationally. Aspects of the project contradict federal government policy, responsibilities and funding protocols related to education.

Policy-Makers and Regulated Policy Work

Throughout the later half of the project, as I discovered how impacts were playing out, and the intentions of some to overhaul adult literacy education, I attempted to connect with policy-makers, mostly working at the provincial level, to raise my concerns.

However, this has and continues to prove challenging. I gained some insights into the nature of regulated policy work that will indeed make it challenging to make a connection and find a way to discuss concerns. The challenge, it seems, is finding a way to work within current policy frameworks.

In an interview, a federal policy-maker explained why the department and those in the department are not aware of the implications of their work in the context of teaching and learning in adult literacy education.

It's kind of a black box for us. We invest more time and effort on the inputs and the outputs, and let others figure out what happens inside the black box. We invest a lot of effort in trying to understand what the labour market needs. What kind of outputs should we have? And try and understand where there is need, where there is capacity, and then try to create conditions in which those two align in some way, and people will do things.

What the policy-maker stated is that they do not know and *don't need to know* the pedagogical implications of their work in order to do their work.

While working on the OALCF, I recognized that the provincial policy-makers were not aware of the implications of developing a curriculum framework that contained a distinct approach to literacy development. Their potential for awareness may be impeded by their adherence to a set of curriculum development principles that acted as shells. The OALCF, like all previous curricular incarnations beforehand, was intended to do the following (based on a synthesis of introductory statements in curricular documents):

- Address learner needs, be learner centred, and facilitate learner transitions;

- Focus on the meaningful application of skills, which will help learners progress more easily;
- Make the work of practitioners easier;
- Be accountable by demonstrating effectiveness and results, and showing achievements in an understandable way;
- Be built on a theoretical foundation and principles of adult education, literacy, and numeracy; and
- Provide a common language and plain language for clarity, consistency, and accuracy that is recognizable by other systems.

With these policy shells in place, I have experienced five different curricular incarnations while working in a provincially funded program. Each one attempted to address the perceived shortcomings of its predecessor. After 15 years of revisions and attempts at developing ‘effective’ program outcomes measures, they continue to prove elusive. The OALCF makes the exact same promises. But for the first time, the regulating texts and processes are not derived from the K-12 system. The ability of the policy shells to be filled with distinct sets of pedagogical processes underscores their functioning as abstract and inherently empty concepts.

The work of filling the shells and producing the various curricular devices is accomplished by consultants. Two kinds of consultants have been hired to do the curricular work over the years: 1) those working outside of the literacy field with a particular expertise in curriculum development; and 2) those working in the literacy field who work as consultants and do project work. They have a shared ability to connect their work and expertise to the operation of the shells and current concerns of governments. They also have specific expertise related to addressing current concerns, that is, use of the ILT and Essential Skills in adult education.

Regulating this work and directing the way that consultants fill the shells are business models and management consultants with business model development expertise. For example, the most recent set of operational guidelines used to support the Ontario PMF was completed by a management consulting firm. Management consultants complete the document—it's 'readable', 'accessible' to programs, written 'clearly'. Policy-makers are pleased, I'm sure, and neither attend to the implications for programs and the people in those programs. The provincial system and the federal department seemingly operate in a closed circle: they do not know and *do not need to know* the pedagogical and program implications of their work.

Operating within and organized by new public management (NPM) ideologies and practices, professional expertise is not required to manage government funded programs (Ward, 2011), like adult literacy education. The provincial policy-makers who oversee the operation of the programs (there are several from various departments in a decentralized NPM model) are not concerned with educational management per se, and the particularities of educational systems, including curriculum and assessments. Their job is to manage a myriad of management devices and mechanisms that are put to use across various government services. What those services are, whether educational, social welfare services, employment supports, etc., is not a concern in NPM. All are managed the same way using similar devices. What this ultimately means is that there is no mechanism in place to involve education expertise or literacy development expertise in the managerial process. It also means there is no mechanism in place to review the managerial process itself from the perspective of adult education, curriculum development or literacy development. There are individuals who will listen, and who

have expressed concern. It's a small field, and we talk. But without an actual mechanism or process in place that policy-makers can access to initiate review, from a perspective other than the managerial one they are steeped in, programs may be stuck with the OALCF and the Essential Skills for awhile.

Research Contributions

The findings and analytical method offer useful insights to education policy analysis, including curriculum studies. The study underscores the importance of understanding the operation of various devices and mechanisms used to actualize policy directives (i.e. curriculum frameworks, performance management frameworks and logic models, and models of thought and action developed for large-scale testing). It demonstrates how the space in-between macro policy directives and micro teaching and learning processes is textually mediated, tangible and knowable.

Much of critical curriculum analysis is focused on the way that policy and curriculum “reproduce” and “transmit” ideology from macro political and economic structures to individual experience, and day-to-day teaching and learning (cf. Apple, 2004). Such an approach subsumes people's experience and activity, and does not provide the conceptual and methodological tools to explicate the textually mediated space in-between. Another line of critical analysis, focusing on responses and reactions to policy and curricular reforms, does indeed look at day-to-day activity and people's experiences. We see, for example, how policy and curricular changes may take time away from teaching in order to prepare for testing or complete required paperwork. But what is not always so apparent is how a particular policy came to be, and how it is part of broader reforms and initiatives that reach well beyond a single program or system.

My study also contributes to (and challenges in a small way) the work of a group of researchers who draw on sociological, ethnographic and critical policy analysis methods to examine the politics, practices and impacts of large-scale assessments of literacy (cf. Literacy as Numbers). The sequences of textual coordination from large-scale assessments to local programs, mapped in this project, explicitly demonstrate how the broader “politics of literacy measurement regimes” (Hamilton, 2013, June 12) enter into and reshape pedagogy and practice through a variety of devices. A missing element in some current conversations is recognition of the role of individuals in this process. *Things are made to happen* by those who make fundamental test development and test management decisions, which are then carried into the technologies and devices. It may appear that the test items and constructs have their own operational ontology, and in a way they do, when picked up and examined at certain points in their trajectory. But they have been *made* to operate in such a way by someone at some point.³⁰ The explication of the level implications is a clear demonstration of the way people can make choices that make inequality happen. The ideological constructs are not merely a property of the device: they were made to happen; and they are used in turn to make inequality happen. The international literacy testing initiative is fundamentally a discursive construction. This can be obscured by the overwhelming barrage of statistics, tables and graphs used to

30 Demonstrating how assessments can be made to operate in many ways, including ways to make situated and sociocultural connections to learning and knowledge that are more equitable and accountable to ‘opportunities to learn’ is the work of a group of psychometricians, assessment experts, and critical sociolinguists in Moss, Pullin, Gee, Haertek, & Jones Young (2008).

display the results of testing. They lead us to believe that the ILT is an impenetrable fortress of statistical analysis and sophisticated psychometric acumen, which, it is in part. However, behind the numbers, supporting the numbers and supplying the numbers and their operations is discursive and ideological work that is both technical and interpretive (terms used by one of the test developers). Discursive technical work was done to develop the error analysis model and the five-stage locating information model, in addition to the “extensive grammar” developed for the scoring protocol, in which discrete statements regulated by the model were used to produce numbers and raw data that *supplied* the complex mathematical modelling processes. Then, an “interpretive scheme” was used to develop the level descriptions’ statements, using the scoring protocols. The creation of the levels according to the scores was also a discursive exercise. No mathematical formulae were used. Patterns of difficulty and “shifts” were *observed* when examining the scores. Alignments between numbers and categories were made, and made easier to understand by rounding up or down on occasion. Highly interpretive and non-technical discursive work is apparent in the construction of the level implications, relying on discursive manoeuvres, operational shifts in meaning, and assumptions. As a discursive project the ILT is infused with ideology—not just the overall project, producing ranking tables, and socio-economic correlational analyses—and is discursively ideological to its core. Nothing remains ‘neutral and objective’ in such a project. Its development, not just its results, and not only its technical operation, is open to critical investigation and ideological analysis, and is accountable to the findings of such work.

Connecting with Educators and Curriculum Developers

The analysis has helped me to think about ways to connect with educators and curriculum developers. Can my discoveries be shared with those who work in programs? Discussing and carrying out an IE informed analysis of the curriculum development process, with and for educators and curriculum developers, could be useful. This would involve gaining an understanding of the limitations of these devices, and their approach to organizing learning activity. Once educators have some insight into their operation, it may open up opportunities to devise alternatives for classroom, and even system wide use.

One possible way to begin is to gain a more analytical understanding of the textually coordinated and highly entrenched process of competency-based curriculum development. Here is a process, set up a century ago, which remains intact. Why does the process have so much staying power? And how do we all end up following the same procedures? I don't have clearly articulated responses at this point. Asking the questions however and recognizing the universality of the competency-based approach allowed me to see through the ubiquitous fog of acceptance surrounding the approach, in order to step back and examine the process. The starting point in a discussion with educators is to recall experiences developing curriculum frameworks, sets of learning objectives, demonstrations and learning plans over the years. They are different situations, and could even involve different educational systems, but the processes are the same. Recognizing the similarities could lead to a breakthrough in understanding.

Some of my frustrations over the years may be similar to other educators and curriculum developers. They can be summed up in the following set of questions and answers:

- Why can't I use the word 'understand' to write a learning objective? Not observable.
- Why can't I simply describe comprehensive projects and learning activities that students actually do? Not measurable.
- Why can't I use the learner's words to describe accomplishments? We can't count that in the system!

Another possible activity could involve an analysis of familiar curriculum frameworks, their components parts and purpose. Recognizing how curriculum frameworks from other jurisdictions operate the same way and use the same fundamental components (i.e. domains, sub-domains, a progress hierarchy, and descriptive statements arranged in the hierarchy) could also be useful. Discovering how the textual processes used to manage and monitor education and learning are entrenched, constant, and pretty much sacrosanct may support the development of small IE informed analytical projects by and for educators.

Can these frameworks be made to operate differently? If the device is changed, can the learning discourse change? If the process for constructing the device changes, becoming a collective and collaborative process³¹, can policy directives change? There have been efforts in the past to change the discourse of learning accountability by creating a

31 The Mozilla WebLiteracy standards project is an example of an on-line collective standards development project (<https://wiki.mozilla.org/Learning/WebLiteracyStandard>). There is much to learn about their process that could be of use in the development of a set of principles and supports for adult literacy learning.

different curricular device, namely Scotland's curriculum framework based on social practice principles, and Equipped for the Future (EFF) from the US, based on humanistic and personal development principles. Understanding these efforts in conjunction with an understanding of their textual coordination could also be a useful way to make curricular changes.

Possible Extensions

A few areas could be further explored. Just mentioned are the impacts of managerial systems that are set up so as to disregard professional expertise. It would be useful to speak with provincial policy-makers directly to better understand the conditions of their work and decision-making. What constraints do they encounter? What sorts of decisions were made by provincial policy-makers to build a learning curriculum using the ES/ILT? What pressures were they experiencing?

I also raised the need to do more ethnographic work from the standpoint of the learners/workers/adults who encounter and are subjected to spin-off tests and related ILT-derived curricula. Also from the standpoint of learners/workers/adults is the need to examine what happens upon entering the Employment Ontario system that literacy is now a part of. The focus on the EO system would also relate to an examination of the impacts of NPM systems on those who are caught up in their textual managerial processes.

In a continued effort to draw attention to the OALCF and inequities experienced by educators in different programs, it may be useful to develop a survey to get some indication of the intensity and prevalence of the impacts. The questions would focus on teaching practices, use (non-use, creative use, non-compliant use, etc.) of specific devices, mechanisms and measures in the accountability system. It would also contain

questions to further examine issues of time spent on various activities, competing priorities and changing relations with learners, community partners and colleagues.

It may also be useful to talk to the main developers of the ILT and Essential Skills to gain further insights into their decision-making and choices during the early developmental stages of each project in order to further investigate their discursive ideological work and its implications.

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Appendix A: Listing of Outcomes Development Initiatives in Ontario

Curricular Outcomes Statements and Related Mechanisms	Audited and Monitored Devices Used to Connect Outcomes and Learning Work
<i>Recognition of Adult Learning Project, local initiatives 1994-1996</i>	
Statements of learning called embedded skills across three levels and five domains (reading, writing, research and reporting, numeracy, computer) Portfolios of student achievements and suggested tasks that a learner may complete	Ministry staff checked to see that each student had a portfolio, but no mandated device was in use to integrate embedded skills with the tasks or to include certain tasks
<i>Working with Learning Outcomes: An Introduction, 1997</i>	
Statements of learning called foundation outcomes were developed across three levels and nine domains (four communications, five numeracy domains) Portfolios of student work	Ministry staff checked to see that each student had a portfolio, but no mandated device was in use to integrate foundation skills with the demonstrations
<i>Goal-directed Assessment: An Initial Assessment Process, 1997</i>	
Document described in great detail a goal-setting and training plan process in which educators developed statements of learning to be documented in a training plan template	Ministry staff checked to see that each student had a training plan and portfolio, but no mandated device was in use to integrate curricular statements in training plan; educator and learner could devise their own statements to describe progress and achievements
<i>Working with Learning Outcomes (Validation Draft), 1998</i>	
Detailed listing of sets of curricular outcomes statements across five levels and 10 domains, referred to as the matrix	Ministry staff checked to see that the training plan incorporated matrix statements to describe progress; educator/learner statements could continue to be used Checklists and rubrics using matrix statements had to be attached to sample work in the portfolio; they could operate as an afterthought and did not have to interfere with sample work
<i>The Level Descriptions Manual, 2000 and demonstrations development initiative</i>	
Simplified listing of the matrix renamed the level descriptions used across five levels and eight domains Training plan template and accompanying tracking sheets using level descriptions indicators Demonstrations created by programs, which served as assessments that integrated level descriptions Common sets of demonstrations developed by educators and curriculum developers for all programs (e.g., Common Assessment of Basic Skills or CABS, Demonstrations Ontario) Training sessions to teach educators how to create demonstrations	Ministry staff checked for completed training plans that organized learning using level descriptions and educator/learner statements Checklists and rubrics using level descriptions or matrix statements were attached to sample work in portfolio; they could continue to operate as an afterthought Introduction of a new approach to developing demonstrations in order to clearly show the accomplishment of specific outcomes described in the level descriptions; the content and format of the demonstration was modelled but not mandated
<i>Essential Skills (mandated integration from 2005-2010)</i>	
Training plan template and accompanying tracking sheets using Essential Skills indicators	Ministry staff continued to check for completed training plans that organized learning using level descriptions and educator/learner

Demonstrations created by programs, which served as assessments Common sets of demonstrations for all programs (e.g., Common Assessment of Basic Skills or CABS) that were then aligned to the Essential Skills (ILT levels) Training sessions teaching educators how to use the Essential Skills as an organizer to recognize learning	statements Checklists and rubrics using level descriptions or matrix statements attached to sample work in portfolio Use of demonstrations; but content and form was not mandated Mandated integration of Essential Skills levels into the training plans and checklists/rubrics attached to sample work in portfolio
Ontario Adult Literacy Curriculum Framework, 2011	
Learner plan embedded into provincial database system; no modifications can be made; can be accessed by other service providers in Employment Ontario Competencies, task groups and level statements from the OALCF curriculum framework document Use of four different assessment devices: 1. Milestones to measure learner progress 2. Culminating Tasks to measure goal completion 3. ILT score assessment (TBD) to measure learner gains 4. Transition assessments chosen by program to indicate readiness to move into next step (e.g., entrance test for secondary or post-secondary program)	Mandatory use of competency statements (i.e. competencies and task groups) in the learner plans in order to register a student Mandatory designation of a certain number of Milestones to be completed in order to show progress; will be used for funding allocation Mandatory use of one culminating task to show goal completion; will be used for funding allocation Eventual mandatory use of a learner gains assessment; will be used for funding allocation

Appendix B: National and International Literacy Testing Initiatives

Testing Initiative and Reports	Methodological Extensions and Adjustments
Survey of Young Adult Literacy United States, 1985 (Kirsch and Jungeblut, 1986)	Initial test tasks used actual and unaltered printed materials
Literacy Skills Used in Daily Activities (LSUDA) Canada, 1989 (Montigny, Kelly and Jones, 1991; Jones, 1993)	Demonstrated that the test tasks could be used by different language groups; test tasks were altered and made more generic to work in two countries and two languages Scores were related to levels and socio-economic impacts were associated with the levels; original attempt at describing level complexity changed
US Department of Labor (DOL) Survey of Workplace Literacy United States, 1990 (Kirsch, Jungeblut and Campbell, 1992)	Use of a questionnaire to develop a 'profile' and relate scores with a range of variables (i.e. gender, age, education attainment, employment status, ethnicity, languages, occupation, immigration, etc)
National Adult Literacy Survey (NALS) United States, 1992 (Kirsch, Jungeblut, Jenkins and Kolstad, 1993)	Established literacy definition: literacy is "using printed and written information to function in society, to achieve one's goals and to develop one's knowledge and potential."
International Adult Literacy Surveys Phase 1, 1994 Canada, Ireland, France*, Germany, the Netherlands, Poland, Sweden, Switzerland (French- and German-speaking regions) and the United States Phase 2, 1996 Australia, New Zealand, Great Britain, Northern Ireland and Flemish Belgium Phase 3, 1998 Chile, the Czech Republic, Denmark, Finland, Hungary, Italy, Norway, Slovenia and Switzerland (Italian-speaking regions) (OECD and Statistics Canada, 1995, 1997 and 2000)	Partnership between the OECD and Statistics Canada: OECD provides oversight; Statistics Canada manages the international testing projects Greater scoring complexity and more demographic profiling
Adult Literacy and Life Skills (ALLSS) Survey Phase 1, 2003 Bermuda, Canada, Italy, Norway, Switzerland, the United States and the Mexican State of Nuevo Leon Phase 2, 2006-2008 Australia, Hungary, Netherlands, and New Zealand (Statistics Canada and OECD, 2005, 2011)	OECD turned its attention to PISA Smaller number of countries participated in these surveys Attempts are made to develop a framework for problem-solving Statistics Canada appears as first organization on reports
Supplemental component skill testing for Levels 1 and 2 United States, 2006 (Strucker, Yamamoto and Kirsch, 2007) Canada, 2007	Relates the accumulation of print-based skills (i.e. decoding, vocabulary and spelling) to ILT levels, and further profiles adults below the Level 3 'threshold'

(Grenier, Jones, Strucker, Murray, Gervais and Brink, 2008)	
UNESCO's Literacy Assessment and Monitoring Program (LAMP) Jordan, Mongolia, Palestine, Paraguay	Use of the ILT model and testing methodology in low and middle income countries Aim is to use results to plan and implement literacy education programs; also incorporates component skills testing
Program for the International Assessment of Adult Competencies (PIAAC) Phase 1, 2008-2013 Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, Netherlands, Norway, Poland, Russian Federation, Slovak Republic, Spain, Sweden, United Kingdom, United States Phase 2, 2012-2016 Chile, Greece, Indonesia, Israel, Lithuania, New Zealand, Singapore, Slovenia, Turkey Phase 3 , begins in 2014	Underpinning model and scoring system remains intact but PIAAC extends text types and mediums. Majority of literacy and numeracy test items are from IALS/ALL surveys and are not new. Prose and document domains combined as literacy, includes narrative and interactive texts in print and digital-looking formats; quantitative renamed as numeracy; integrated component skill measures (three vocabulary-type tests); extended test design and method to create new test for "problem-solving in technology-rich environments" an integration of basic computer manipulations and reading Continue with extensive and updated background questionnaire Added "module on skill use", a questionnaire focused on frequency of and use of "generic" employment skills

Appendix C: Ethics Approval, 2009-2010

File Number: 08-09-03 Date (mm/dd/yyyy): 09/14/2009


Université d'Ottawa **University of Ottawa**
Service de subventions de recherche et d'éthologie Research Grants and Ethics Services

Ethics Approval Notice
Social Science and Humanities REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Maurice	Taylor	Education / Education	Supervisor
Christine	Pinsent-Johnson	Education / Education	Student Researcher

File Number: 08-09-03

Type of Project: PhD Thesis

Title: Writing the Language of Essential Skills into Student Training Plans: An Institutional Ethnography of Ontario Adult Literacy Education

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
09/14/2009	09/13/2010	1a

(1a: Approval, 1b: Approval for initial stage only)

Special Conditions / Comments:
N/A

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Appendix D: Ethics Approval, 2010-2011

File Number: 08-09-03 Date (mm/dd/yyyy): 09/13/2010


Université d'Ottawa **University of Ottawa**
Bureau d'éthique et d'intégrité de la recherche Office of Research Ethics and Integrity

Ethics Approval Notice
Social Science and Humanities REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

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File Number: 08-09-03

Type of Project: PhD Thesis

Title: Writing the Language of Essential Skills into Student Training Plans: An Institutional Ethnography of Ontario Adult Literacy Education

Renewal Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
09/14/2010	09/13/2011	1a

(1a: Approval, 1b: Approval for initial stage only)

Special Conditions / Comments:

Title of project has been simplified on consent forms. New title: Writing the Language of Essential Skills into Student Training Plans: An Institutional Ethnography.

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Appendix E: Ethics Approval, 2011-2012

File Number: 08-09-03

Date (mm/dd/yyyy): 09/21/2011



Université d'Ottawa
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Ethics Approval Notice **Social Science and Humanities REB**

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File Number: 08-09-03

Type of Project: PhD Thesis

Title: Writing the Language of Essential Skills into Student Training Plans: An Institutional Ethnography of Ontario Adult Literacy Education

Renewal Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
09/14/2011	09/13/2012	Ia

(Ia: Approval, Ib: Approval for initial stage only)

Special Conditions / Comments:
N/A

Appendix F: Complete Set of ILT Level Descriptions (IALS, ALLSS)

(Kirsch, et al., 2001, pp. 340, 343, 346)

	Prose	Document	Quantitative
Level 1 (0–225)	Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Tasks in this level tend to require the reader either to locate a piece of information based on a literal match or to enter information from personal knowledge onto a document. Little, if any, distracting information is present.	Tasks in this level require readers to perform single, relatively simple arithmetic operations, such as addition. The numbers to be used are provided and the arithmetic operation to be performed is specified.
Level 2 (226–275)	Some tasks in this level require readers to locate a single piece of information in the text; however, several distractors or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the reader to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.	Some tasks in this level require the reader to match a single piece of information; however, several distractors may be present, or the match may require low-level inferences. Tasks in this level may also ask the reader to cycle through information in a document or to integrate information from various parts of a document.	Tasks in this level typically require readers to perform a single operation using numbers that are either stated in the task or easily located in the material. The operation to be performed may be stated in the question or easily determined from the format of the material (for example, an order form).
Level 3 (276–325)	Tasks in this level tend to require readers to make literal or synonymous matches between the text and the information given in the task, or to make matches that require low-level inferences. Other tasks ask readers to integrate information from dense or lengthy text that contains no organizational aids such as headings. Readers may be asked to generate a response based on information that can be easily identified in the text. Distracting information is present, but is not located near the	Tasks in this level, like those at the previous levels, ask readers to perform multiple-feature matches, cycle through documents, and integrate information; however, they require a greater degree of inferencing. Many of these tasks require readers to provide numerous responses but do not designate how many responses are needed. Conditional information is also present in the document tasks at this level and must be taken into account by the reader.	In tasks in this level, two or more numbers are typically needed to solve the problem, and these must be found in the material. The operation(s) needed can be determined from the arithmetic relation terms used in the question or directive.

	correct information.		
Level 4 (326–375)	These tasks require readers to perform multiple-feature matches and to integrate or synthesize information from complex or lengthy passages. More complex inferences are needed to perform successfully. Conditional information is frequently present in tasks at this level and must be taken into consideration by the reader.	Tasks in this level, like those at the previous levels, ask readers to perform multiple-feature matches, cycle through documents, and integrate information; however, they require a greater degree of inferencing. Many of these tasks require readers to provide numerous responses but do not designate how many responses are needed. Conditional information is also present in the document tasks at this level and must be taken into account by the reader.	These tasks tend to require readers to perform two or more sequential operations or a single operation in which the quantities are found in different types of displays, or the operations must be inferred from semantic information given or drawn from prior knowledge.
Level 5 (376–500)	Some tasks in this level require the reader to search for information in dense text which contains a number of plausible distractors. Others ask readers to make high-level inferences or use specialized background knowledge. Some tasks ask readers to contrast complex information.	Tasks in this level require the reader to search through complex displays that contain multiple distractors, to make high-level, text-based inferences, and to use specialized knowledge.	These tasks require readers to perform multiple operations sequentially. They must disembed the features of the problem from text or rely on background knowledge to determine the quantities or operations needed.

Appendix G: Complete OALCF Framework

(Ontario Ministry of Training Colleges and Universities, 2011b, p. 6)

Competency	Task Group	Indicators		
		Level 1	Level 2	Level 3
A Find and Use Information	A1 Read continuous text	A1.1 Read brief texts to locate specific details	A1.2 Read texts to locate and connect ideas and information	A1.3 Read longer texts to connect, evaluate and integrate ideas and information
	A2 Interpret documents	A2.1 Interpret very simple documents to locate specific details	A2.2 Interpret simple documents to locate and connect information	A2.3 Interpret somewhat complex documents to connect, evaluate and integrate information
	A3 Extract info from films, broadcasts & presentations	Not applicable: Tasks in this task group are not rated for complexity		
B Communicate Ideas and Information	B1 Interact with others	B1.1 Participate in brief interactions to exchange information with one other person	B1.2 Initiate and maintain interactions with one or more persons to discuss, explain or exchange information and opinions	B1.3 Initiate and maintain lengthier interactions with one or more persons on a range of topics
	B2 Write continuous text	B2.1 Write brief texts to convey simple ideas and factual information	B2.2 Write texts to explain and describe information and ideas	B2.3 Write longer texts to present information, ideas and opinions
	B3 Complete & create documents	B3.1a Make straightforward entries to complete very simple documents B3.1b Create very simple documents to display and organize a limited amount of information	B3.2a Use layout to determine where to make entries in simple documents B3.2b Create simple documents to sort, display and organize information	B3.3a Decide what, where and how to enter information in somewhat complex documents B3.3b Create more complex documents to sort, display and organize information
	B4 Express oneself creatively	Not applicable: Tasks in this task group are not rated for complexity		

Competency	Task Group	Indicators		
		Level 1	Level 2	Level 3
	C2 Manage time	C2.1 Measure time and make simple comparisons and calculations	C2.2 Make low-level inferences to calculate using time	C2.3 Find, integrate and analyze numerical information to make multi-step calculations using time
	C3 Use measures	C3.1 Measure and make simple comparisons and calculations	C3.2 Use measures to make one-step calculations	C3.3 Use measures to make multi-step calculations; use specialized measuring tools
	C4 Manage data	C4.1 Make simple comparisons and calculations	C4.2 Make low-level inferences to organize, make summary calculations and represent data	C4.3 Find, integrate and analyze data; identify trends in data
D Use Digital Technology	n/a	D.1 Perform simple digital tasks according to a set procedure	D.2 Perform well-defined, multi-step digital tasks	D.3 Experiment and problem-solve to perform multi-step digital tasks
E Manage Learning	n/a	E.1 Set short-term goals, begin to use limited learning strategies, and begin to monitor own learning	E.2 Set realistic short- and long-term goals, use a limited number of learning strategies, and monitor own learning	E.3 Set realistic short- and long-term goals, use a variety of learning strategies, and monitor and evaluate own learning
F Engage with Others	n/a	Not applicable: This competency is not rated for complexity		