

**YOUTHFUL BOOKWORMS:
STUDENTS' EXPERIENCES WITH CRITICAL LITERACIES IN THE
CONTEXT OF THE ONTARIO SECONDARY SCHOOL LITERACY TEST**

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ABSTRACT

This qualitative multi-method study investigates potential construct-related outcomes of using a high-stakes standardized literacy test that is based on a limited construct. This study presents comprehensive construct and outcomes analyses of the Ontario Secondary School Literacy Test (OSSLT), as one example of a high-stakes literacy testing program, focusing on critical literacies in particular. Critical literacies are shown to be underrepresented in the test's construct sample despite being valued in the relevant educational domain being measured. The two central research questions shaping this study are as follows: (1) What are students learning about critical literacies in an educational context that includes the OSSLT?; (2) How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills? This study is structured as an arts-informed multiple case study. Participants included ten Grade 11 and 12 students who contributed to the study through multiple research activities, including interviews and group conversations, questionnaires, activity handouts, as well as journaling, photography, and graffiti walls activities. The findings of the outcomes analysis (1) identify limitations with regards to students' understandings of literacy, including being unfamiliar with a concept of critical literacies; (2) demonstrate that students align their understandings of literacies with the reading and writing skills that are valued on the high-stakes literacy test while also wondering what else might count as literacy; and (3) suggest that the OSSLT is perceived by students to be influencing their literate identities, their relationships with literacies, and their learning trajectories. As an original contribution to knowledge, this study demonstrates how an in-depth analysis of a test's literacy construct can be performed, and this study presents a qualitative multi-method methodology for conducting research into the outcomes of literacy education in an educational context that includes a high-stakes literacy test.

Keywords: validity research, construct analysis, critical literacies, literacy assessment, high-stakes testing, Ontario Secondary School Literacy Test (OSSLT), qualitative research

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CHAPTER 1. INTRODUCTION

Large-scale, high-stakes, standardized language and literacy tests are being used across Canada to measure and report on students' achievement. Large-scale refers to the scope of the population being tested. High-stakes refers to the potential consequences of the testing practice. When test results are used to make decisions that “carry serious consequences” (AERA, 2000, para. 3) or that have “potentially serious consequences” (Kane, 2002, p. 31), such as being used either to satisfy a distinct graduation requirement or to, in part, determine a student's course marks, the testing program can be considered to have high-stakes. Standardized refers to the mechanisms used to ensure that the large-scale population taking the test can be evaluated in comparable ways. Standardized testing requires that all test takers participate in the same testing experience with the same rules governing the testing conditions. Standardization can also be observed when tests are scored in such a way that the judgements rendered leading to a result are said to be consistent, at least to a certain degree, for all tested individuals.

Across Canada, the successful completion of a large-scale, high-stakes, standardized language or literacy test is soon to be a graduation requirement in some form for almost all students. There are considerable differences in how high-stakes provincial language and literacy testing programs are being designed, transformed, and used across Canada though. Given that provincial tests must relate to a province's curriculum, some differences are necessary. Ongoing research is needed (1) to ensure these testing programs work in complementary ways with the goals of literacy education programs across Canada, (2) to understand the potential outcomes of these programs, and (3) to learn how these programs can continue to improve. Assessing high-stakes testing programs is a subjective, value-laden process. In this chapter, I present an overview of high-stakes language and literacy testing in Canada as a way of positioning the current study, which focuses on the Ontario context in particular. I then present an overview of this study, including the objectives of the research, a rationale and justification for the investigation, and my positionality as a researcher. This chapter concludes with a mapping of the dissertation.

An Overview of High-Stakes Language and Literacy Testing in Canada

A review of the Ministry of Education websites for each Canadian province or territory was conducted to learn more about what high-stakes language or literacy testing programs look like across Canada. Table 1 presents an overview of the highest levels of high-stakes provincial

language and literacy testing programs in Canadian schools. In most of the Canadian provinces and territories, students enrolled in Grade 12 English courses must complete a provincial examination that accounts for a percentage of their final course mark. In these provinces and territories, English is not the only subject area that is being emphasized though; Students are required to write a number of provincial examinations. In Nova Scotia, there are provincial exams associated with Grade 12 courses; however, students are no longer required to write a provincial exam for Grade 12 English courses. In Newfoundland and Labrador, only students enrolled in one of the two Grade 12 English courses are required to complete a provincial exam. It is possible that, in Saskatchewan, students will not be required to complete provincial exams, if they are taught by a teacher who is not only certified but also accredited and who chooses to “grant 100% of students’ final marks” (Saskatchewan Ministry of Education, 2016b).

In Ontario, New Brunswick, and soon to be also Prince Edward Island, British Columbia, and the Yukon, students are tested in relation to a literacy graduation requirement, which sets these provinces and territories apart from the others. Prince Edward Island was the last remaining province without any mandated standardized provincial literacy testing as a graduation requirement. Their new testing program is an example of Ontario’s influence on what testing will look like in that province moving forward. The documentation released to introduce what the new testing program will entail includes a note acknowledging and crediting the Education Quality and Accountability Office (EQAO) in Ontario (see Prince Edward Island Department of Education, Early Learning and Culture, n.d.-a). The same skills are being measured and the new literacy test has the same components as Ontario’s test (see EQAO, 2012f, 2013d; Prince Edward Island Department of Education, Early Learning and Culture, n.d.-b, n.d.-c). New Brunswick’s testing program is also comparable to Ontario’s; however, in 2015, New Brunswick announced they would be making changes as part of a “realignment” and “restructuring” of their program (see New Brunswick Department of Education and Early Childhood Development, n.d.). Ontario’s structure is, nevertheless, particularly unique across Canada in that there is an “independent ‘arms-length’ agency of the Ontario government that is responsible for designing, conducting, and reporting on curriculum-based large-scale assessments in publicly funded Ontario schools” (OMOE, 2010b, p. 146). Although the Ministry of Education works with EQAO, there is a specific accountability distinction being made in Ontario as a result of how the high-stakes evaluations are being conducted and reported on.

Table 1. *Overview of Highest Level of High-Stakes Language and Literacy Testing in Canada*

Province	Name of Exam	Course/Graduation Requirement
British Columbia ^a	Provincial Exam; Being Replaced with a Literacy Graduation Assessment ^b	40% of Grade 12 English Course Mark; Being Replaced with a Literacy Graduation Requirement ^c
Alberta ^d	Diploma Exam	Previously 50% of Grade 12 English Course Mark; Decreased to 30% in September 2015 ^e
Saskatchewan	Departmental Exam	40% of Grade 12 English (Canadian Authors) Course Mark; 40% of Grade 12 English (World Authors) Course Mark ^f
Manitoba	Standards Test	30% of Grade 12 English Course Mark ^g
Ontario	Ontario Secondary School Literacy Test	Literacy Graduation Requirement; First Opportunity in Grade 10 with Option to (Re)Write in Grade 11, Grade 12, and/or to Complete a Literacy Course, if Unsuccessful ^h
Quebec	Secondary V Uniform Exam	33.5% of Secondary V English Language Arts Course Mark; Course Mark of 60% is Required to Pass the Course ⁱ
Newfoundland and Labrador	Public External Exam	50% of Grade 12 English (Academic) Course Mark ^j
New Brunswick	English Language Proficiency Assessment	Literacy Graduation Requirement; First Opportunity in Grade 9 with Reassessment if Unsuccessful in Grade 11 ^k
Nova Scotia	Nova Scotia Examination	Previously 30% of Grade 12 English Course Mark; Replaced following the 2012 Test Administration with 20% of Grade 10 English Course Mark ^l
Prince Edward Island	Secondary Language Arts Test / Secondary Literacy Assessment	Literacy Graduation Requirement; First Opportunity in Grade 10 ^m

Note.

^a The Yukon uses British Columbia's testing program (Yukon Department of Education, 2017).

^b See British Columbia Ministry of Education (n.d.-a, 2015b, 2016).

^c See British Columbia Ministry of Education (n.d.-b, 2015a, 2015c).

^d The Northwest Territories and Nunavut both use Alberta's Diploma Exams.

^e See Alberta Education (2015a, 2015b, 2015c, 2015/2016); Northwest Territories Department of Education, Culture, & Employment (2016). Nunavut's website still indicates 50% (Nunavut Department of Education, n.d.).

^f See Saskatchewan Ministry of Education (n.d., 2015, 2016a).

^g See Manitoba Education (2015, 2016).

^h See the Ontario Ministry of Education (OMOE) (2015f); EQAO (2016e, p. 21).

ⁱ In Quebec, there is no Grade 12 year; Secondary V is the highest level of secondary education in Quebec; See Quebec Ministère de l'Éducation, du Loisir et du Sport (2014, p. 7).

^j Only students enrolled in the "academic," and not "the general," Grade 12 English course are required to complete a provincial exam (Newfoundland and Labrador Department of Education and Early Childhood Development, n.d.-a, p. 40, n.d.-b, n.d.-d, p. 8, 2017). The general course "is designed for students [. . .] who continue to require extra support to strengthen essential literacy skills" (n.d.-c, p. 22).

^k See New Brunswick Department of Education and Early Childhood Development (2010/2013).

^l See Nova Scotia Department of Education and Early Childhood Development (n.d.-a, n.d.-b, n.d.-c); Nova Scotia Education Evaluation Services (2011).

^m This program has yet to be officially implemented; See Prince Edward Island Department of Education, Early Learning and Culture (2016a, 2016b).

Given the prevalence and significance of high-stakes language and literacy testing programs in Canada, ongoing research is needed to continue to critically consider the design, implementation, and outcomes of using these programs. High-stakes standardized literacy tests are being used as measures of accountability in Canada; however, are the outcomes of using these tests in relation to students' literacy education being sufficiently researched and taken into consideration when deciding to continue using this specific type of accountability program?

Focusing on the Ontario Context

Since all high-stakes language and literacy testing programs differ, the focus of this study is on the Ontario context in particular as one example of how a literacy test is being used for accountability purposes. The Ontario Secondary School Literacy Test (OSSLT) is being used in Ontario as part of a test-based accountability program to ensure that students are able to demonstrate a basic level of proficiency in terms of a few select reading and writing skills prior to graduating with a high school diploma. The understanding seems to be that educators will have access to data that can be used to help identify when interventions are necessary to support the literacy education of students who fail to successfully complete the OSSLT. According to the Education Quality and Accountability Office (EQAO, 2010b), provincial testing is also intended to inform the public about students' achievement:

The publicly funded education system is accountable to the public. It has a responsibility to demonstrate the achievement of its students and meet the legitimate information needs of parents, guardians and the Ontario public with regard to education outcomes. Ontario's provincial testing program, which measures the achievement of every student across the province in key grades, was created in part because parents called for an independent gauge of how their children are achieving in relation to a provincial standard. (p. 1)

Given the significance of the data being reported, it is concerning that literacy is being measured so narrowly. It is also concerning that many students are failing to successfully complete the test. A review of the past seven years of released OSSLT test results (2010-2016) shows that there are consistently approximately 35,000 to 40,000 students across Ontario who fail to successfully complete the OSSLT each year (see EQAO, 2010e, 2011i, 2012e, 2013h, 2014h, 2015k, 2016d). Since the 2010 administration of the OSSLT, the lowest success rate was most recently in 2016 with an approximate rate of 75% of students who participated in the testing receiving successful results and 25% of students receiving unsuccessful results (EQAO, 2016d). EQAO often highlights only the results of students who are writing the test for the first

time in Grade 10 though, which makes the success rate seem higher (see EQAO, 2016b). For instance, while EQAO (2016b) reported that the success rate for Grade 10 students was 81% for the 2016 test administration, the success rate for previously eligible students was only 51% (EQAO, 2016d, p. 61). According to EQAO, “Previously eligible students are those who were unsuccessful on a previous administration, were deferred from a previous administration or arrived in an Ontario school during their Grade 11 or 12 year” (EQAO, 2015f, p. 39). These percentages have remained fairly consistent from 2010 to 2016. The number of previously eligible students who are taking the Ontario Secondary School Literacy Course (OSSLC) as an alternative instead of writing the OSSLT has continued to increase each year. In 2012 (EQAO, 2012e), 10,421 students (or 20% of previously eligible students) took the course. In 2016 (EQAO, 2016d), 17,836 students (or 32% of previously eligible students) took the course. This means that fewer students’ achievement potential is being represented in the results that are being reported annually.

Focus of This Study

This study focuses on one example of a high-stakes literacy test being used in Ontario to investigate how a test’s construct relates to, and might potentially influence, students’ understandings and experiences of literacies. Framing this study is a comprehensive analysis of the test’s construct, which specifies what in particular is being measured and reported on. Considering the design of a test’s construct is a productive starting point for any inquiry into the validity of using a test, and that is where this research began. The results of the construct analysis, which included mapping the construct of the test in relation to both the curriculum and current literacy theories, indicated that critical literacies, which are valued in both the curriculum and current research, are underrepresented in the measurement context. This finding is significant because the underrepresentation of a construct is a threat to the validity of using a test. Claims about achievement that are based on a limited sampling of a construct might not adequately reflect an individual’s achievement of the broader domain. This study focuses on how the use of a test that attributes high-stakes to, and highly values, only particular aspects of a construct, might relate to, and potentially influence, students’ literacy education. Are test results an effective reflection of students’ learning and their achievement? What happens to the aspects of the construct that are not represented on the test? With such high-stakes attributed to particular aspects of students’ education, are other aspects of literacy education being devalued or

overlooked? If so, this would suggest that the testing practice could potentially be negatively influencing the very construct it is striving to measure. What is being measured through a test, and how that relates to the construct a test claims to be able to measure and report on, requires extensive critical analysis. Construct analysis provides a strong foundation for this study.

Following a thorough analysis of the construct of the literacy test, and finding the test's construct to be limited, this study focuses on the potential construct-related outcomes of using a high-stakes literacy test that is based on a limited construct. The results of the analysis of the construct situate the study's particular focus on critical literacies. The intention of the outcomes analysis, which is the focus of this study, is to learn how students' critical literacies education is developing in an educational context that includes the high-stakes test. Both the framing and the design of this study were constructed with considerable intentionality about how a strong example of validity research could be performed.

Research Questions. This study focuses in particular on students' understandings and their experiences of critical literacies in an educational context that includes a high-stakes standardized literacy test. The central research questions shaping this study are as follows:

- What are students learning about critical literacies in an educational context that includes the OSSLT?
- How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills?

In order to respond to these research questions, this study presents an analysis of how students (a) understand and conceptualize literacies, (b) relate their life experiences to literacies and/or to critical literacies, (c) perceive literacy influences, (d) value literacies, (e) experience the OSSLT, and how they (f) perceive the OSSLT to be a literacy influence. The analysis of the potential outcomes of using this test is framed by, and situated in relation to, a comprehensive analysis of the test's construct, which illustrates that critical literacies are underrepresented in the test's construct, despite these skills being valued in the curriculum and in current research.

Methodology and Participants. A qualitative multi-method research design was used to conduct this research into the potential outcomes of using a high-stakes standardized literacy test. The study was structured as a multiple case study, and data was collected using arts-based methods. The findings are based on the contributions made by ten participants across three research sites. Nine of the participants were in Grade 11 and one participant was in Grade 12. One of the research sites was at a school, and the other two were at after-school youth programs.

This study received approval from the University of Ottawa's Research Ethics Board. Approval was also received from the participating school board, and permission to conduct research was granted by the manager of the participating youth program. Student/youth assent forms were signed and submitted by those interested in participating in the study. For participants at the school research site, parent/guardian consent forms were also signed and submitted in accordance with the school board's guidelines. Letters of permission were signed and submitted by the principal of the school site and by the program manager of the after-school youth program. Participants demonstrated that they were aware that they could make choices about their involvement throughout the study and that they were able and willing to ask questions about the study. The research activities used offered the participants an educational experience and a space for the participants to reflect on their experiences with regards to their literacy education. I am incredibly grateful for the contributions made by the participants, and I hope that their work and their voices, although now anonymized, can be shared in ways that make the difference they sought to make when deciding to participate in this study. Self-selected and/or assigned pseudonyms are used throughout this dissertation, and a conscientious masking of the data was performed, to conceal the identities of the individuals who participated in the study.

Objectives of the Research

The three primary objectives of this study are to (1) initiate a critical discussion that is informed by both educational measurement and literacy research, (2) promote students' critical engagement with their education, and (3) demonstrate the value of critical literacy skills.

A Critical Discussion: Educational Measurement and Literacy Research Communities.

One of the objectives of this research is to help foster a critical discussion about literacy assessment that is informed by both educational measurement and literacy research. These two areas of research are, in many ways, distinct from one another within the field of educational research. When constructing high-stakes standardized literacy tests, a blending of the knowledges from both fields of research is required though to ensure that the methods being used to assess knowledges and skills are commensurate with the knowledges and skills that are being measured and reported on. Capturing a construct effectively also requires extensive knowledge and understanding about the field of study that is being measured. Similar to Huot's (2002) approach of staying connected and working from within both fields of educational measurement and literacy, I draw upon both of these fields of research as a way of developing a form of

discursive “hybridity” (C. T. Clark, Blackburn, & Newell, 2010, p. 126) that can be used to analyze and assess both the measurement methods and the constructions of literacy being presented. I do not account for all the nuances or the diversity that exist within these fields though; instead, I construct particular understandings of validity research and of critical literacies drawing upon both discourse communities. It is not really ever the case anyways that someone “exemplifies a discourse in a ‘pure’ form” (W. Morgan, 1997, p. 3). As C. T. Clark et al. (2010) argue, “The scholars who engage in conversations across research paradigms [and] scholarly fields [. . .] provide us with a way of moving forward” (p. 126). Both validity research and literacy research are continually evolving fields, and, as such, literacy testing practices need to be adaptable and continuously reviewed to understand how they align with the current states of research and to ensure tests are able to measure the complex constructs they claim they are measuring. Drawing on multiple fields of research and working within multiple discourse communities is what enhances the quality of this research. Initiating a critical discussion about a standardized literacy test as the product of working within this hybridized space is one of the primary objectives of this research.

Youth Engagement With Education. Another one of the primary objectives of this research was to create spaces for critical and reflective conversations about literacy education and assessment. I believe students should critically engage with their education, which includes questioning and reflecting on assessment and measurement opportunities. How do assessment opportunities relate to one’s ongoing education? Do the results constructed and produced using a particular assessment tool seem to be an accurate reflection of what an individual feels they are capable of achieving either in that context and/or in other contexts? What can be learned through and from an assessment opportunity? In the case of high-stakes standardized testing programs, it is important to consider that these tests hold a considerable amount of power in asserting not only which knowledges and skills will be most highly valued but also what will count as a demonstration of achievement or of achievement potential. Questioning why particular tools are being used and how they relate to, and might also be influencing, students’ education is a worthwhile reflection. This objective of encouraging students to critically reflect upon and engage with their education was actualized through the data collection process of this study. Students were provided with an opportunity to participate in a critical dialogue about their experiences with literacies and the OSSLT. Throughout the research activities, students were

encouraged to step back, to pause, to reflect, and to critically evaluate what works for them and what does not work for them and to consider why or why not that might be the case. As part of the design of this study, I sought to develop generative spaces that could make critical engagement with education possible.

Prioritizing Critical Literacies. Another one of the objectives for this study is to prioritize critical literacies in particular. I value critical literacies because this conceptualization of what engagement entails prioritizes questioning and ongoing reflection, which are both essential to personal growth and learning. Throughout this study, I sought to initiate a conversation about how all literacies can be conceptualized within an overarching critical literacies framework. Ongoing learning and skill development are prioritized within the proposed critical literacies construct for this study. Critical literacies are not distinct skills that stand in isolation from other instances or types of literacies engagement. Critical literacies is a lens through which all engagements with literacies can be navigated. Through this research, I prioritize critical literacies because I believe the skills that are most often aligned with this body of research are the skills that can enable individuals to actively negotiate the world. Critical literacies capitalize on the power of metacognitive awareness and reflective skills, which are necessary for learning.

Rationale and Justification for the Investigation

This study expands upon current research on high-stakes standardized literacy testing. It also highlights the significance of examining a test's construct and construct-related outcomes. This study also serves as a demonstration of qualitative validity research in particular. In the sections that follow, I discuss each of these rationales and justifications for conducting this study.

Expansion of Current Research on High-Stakes Standardized Testing. Conducting this research is important given that both internationally and nationally, high-stakes standardized testing has been criticized on numerous grounds. Countless researchers have been studying diverse aspects of these systems for years, and the research continues to question the validity of these testing practices. The following is an overview of current literature and the arguments that highlight concerns about the influence high-stakes testing can have on teaching and learning. I also highlight research addressing concerns about what knowledges and skills are being tested.

Focus on test preparation. Earl (1999) and B. T. Williams (2005) are both critical of testing practices that pervade the learning environment. When there are high-stakes attached to a test, preparing for the test and ensuring success becomes of utmost importance to test takers. Teachers

may feel an obligation to help prepare students for the test, and they may alter their teaching practices in favour of mirroring the format and the expected content of the test. Test preparation can impact teachers' pedagogical choices resulting in a narrowing of the curriculum (Hillocks, 2002, 2003; Kincheloe, 2003; Marshall, 2009). In the Ontario context, this is a central concern as test preparation frequently infiltrates classroom instruction (Brand, 2010; Luce-Kapler & Klinger, 2005, McWhorter, 2003). According to Pinto, Boler, and Norris (2007), "There is no doubt that preparation for the OSSLT has some impact on classroom practice" (p. 87).

Disconnect between test and curriculum. What makes the impact of testing practices on pedagogy more threatening is that there is often an underrepresentation of diverse literacy skills and processes on high-stakes standardized literacy tests (Lotherington, 2004), which reveals a disconnect between the test, the curriculum, and the theories and relevant field of research (Slomp, 2005, 2007). In the Ontario context, tests have been criticized as being improperly constructed and for inadequately representing the literacies that youth are engaging with every day (see Lotherington, 2004; Pinto et al., 2007; Volante, 2007). Comments from students during Fox and Cheng's (2007) study about the reading comprehension portion of the OSSLT demonstrate a shared reflection and agreement amongst students that the test does not parallel their classroom experiences with literacies. This highlights not only that there is a disconnect between the test and the enacted curriculum but also that not all teachers resort to explicit test preparation in favour of the test's literacy construct. Reflecting on the test, some of the students said they "do not generally 'read this way'" (p. 16). Students reported that, in their classes, there is discussion and they get to ask questions. These students also seemed to think that something was lacking in the test because most of the answers were provided for them in either the question or the passage itself. One of the students said, "'you even have the answers in front of you, A, B, C or D ... in the multiple choice questions'" (p. 16). Another student said, "'All the answers are there...in the passage. You just need to do it. You just need to get it done'" (p. 16).

Disregard towards affective issues. Literacies are complex, and a one-size-fits-all approach (Hoffman, Paris, Salas, Patterson, & Assaf, 2003; Janesick, 2007) does not take into account how affective issues relate to literacy experiences. Standardized literacy tests offer a structured and rigid environment, which challenges the relationships that could otherwise exist between students' motivations, values, interests, needs, and/or prior experiences across diverse educational, social, cultural, and community contexts and how they engage with literacies. In

studies looking at how English Language Learners and English as a Second Language students perceive, and perform on, the OSSLT, there are reported issues of language and cultural bias (see Cheng, Fox, & Zheng, 2007; Cheng, Klinger, & Zheng, 2007; Fox & Cheng, 2007; Klinger, Rogers, Anderson, Poth, & Calman, 2006).

Prioritization of Construct Design and the Assessment of Construct-Related Outcomes.

In addition to drawing attention to various consequences or outcomes of testing, this study also emphasizes the significance of analyzing a test's construct in order to be able to assess validity claims about the use of a testing program. Test developers and test users have a responsibility to ensure that the literacies being prioritized and valued on high-stakes literacy tests are reflective and representative of the curriculum and of students' educational experiences. Students must have sufficient opportunities to have learned and developed the skills being assessed (AERA, 2000). Test developers and test users are also responsible for attempting to ensure that a testing experience will not and does not hinder or negatively influence students' literacy understandings or educational experiences. When tests have associated high-stakes, these tests become powerful authorities in defining what literacies are and how they can be demonstrated and evaluated. In Ontario, considerable value is attributed to not only the OSSLT's test results, which are intended to reflect students' achievement, but also to the test's literacy construct, which arguably defines a particular literacy curriculum for all Ontario students. As a high-stakes test, the OSSLT, alongside the literacy graduation requirement, holds considerable power in defining which literacy skills are most highly privileged for all students. Methods for investigating a test's construct as well as potential construct-related outcomes are needed to better understand how large-scale, high-stakes, standardized literacy tests are addressing and serving educational needs.

Demonstration of Qualitative Validity Research. Another justification for this study is that it demonstrates how the complex work of investigating the potential influence of a high-stakes literacy testing program can be designed and conducted using qualitative methods. One of the contributions to knowledge being made through this study is how validity research can be conducted using a qualitative methodology. Throughout the study, I demonstrate the unique affordances of using a qualitative methodology. In order to conduct both the construct analysis framing the study and the outcomes analysis, I used multiple qualitative methods to enhance meaning-making opportunities. This study is an example of systematic analysis and detailed interpretive work that strives to make meaning out of a diversity of texts and narratives. More

specifically, this study shows how qualitative inquiry and interpretivist methods, including various forms of mapping, critical re-readings, questioning, and the layering of texts, can be used to investigate a test's construct as well as potential construct-related outcomes of test use and test score use. When multiple methods are used to construct knowledge, and when multimodalities are engaged, unique opportunities to question, to layer texts, and to interpret the construction of knowledges become possible. This study is, thus, significant in its ability to demonstrate the kinds of complex data researchers might have to learn to work with when assessing the potential outcomes of high-stakes literacy testing and when making validity judgements about the use of tests and test scores. This study shows that validity research requires a commitment to working with complex forms of data. As will be explained in greater detail in the overview of the conceptual framework shaping this study, research into the consequences or outcomes of using a test in a particular context is often considered to be too demanding a task or too onerous of a research process. This study demonstrates how validity research is never complete or all-encompassing in terms of all possible facets of a testing program, but much can be learned through immersive analysis of a few key aspects of a test, and most significantly by beginning to question the very construct driving the design of the test and also by considering the potential consequences or construct-related outcomes of a using a test.

Researcher's Positionality

In qualitative research, the role of the researcher is emphasized as having a considerable influence on the findings of the study. The researcher is understood to be an “instrument of inquiry” (Patton, 2015, p. 3; see also Merriam, 2009; Stake, 2010). The uniqueness of the qualitative researcher is what makes possible original contributions to knowledge. Because of the role that a researcher's previous knowledges, skills, and experiences can have on how a study is conceptualized, conducted, and reported, the research is subjective (Stake, 2010, p. 29). In this section, I discuss a few connections I have with the research topic and the methods being used. I explain my interest in conducting this inquiry, and I introduce some of the broader questions and wonderings I have about standardized literacy testing that I return to in the conclusion of the study. I also present an overview of some of the tensions and challenges that I reflected on while conducting this instance of validity research. This section is intended to provide the reader with a few possible lenses through which they can read and make sense of this study.

Reflecting on who I am as a researcher, and what I bring to this study, I realize there are values I hold as a researcher and qualities that I bring to this work that have uniquely contributed to determining the composition and the characteristics of this work. In particular, I believe research should strive to create generative spaces that make learning possible, I believe drawing upon multiple fields of knowledge and multiple methods can enhance the quality of research, and I believe that analytical work should be extensive and the product of many critical re-readings. I also appreciate research findings that can potentially be used to inform positive social change. In the chapters that follow, I present a study that is evidence of these values, and, in the sections that follow, I share why I have structured and presented this study in the ways that I have.

Working in a Hybrid Space. I have designed and conducted research that is built within a hybridized space that draws upon both educational measurement and literacy research. Both educational measurement and literacy education research are broad and diverse fields, and, through this study, I present a remixed version of both validity research and critical literacies research as the foundation for this hybridized space. Through this study, I emphasize in particular the significance and the necessity of privileging literacy research when designing and judging the quality of literacy assessments. Working in this hybridized space is uniquely relevant to my positionality as a researcher and the qualities that I bring to this study. As a researcher, I value reading deeply and extensively, I appreciate opportunities to engage in immersive analytical work that involves interpretation and problem solving, and I believe it is important to question and re-question, to consult multiple sources, and to reflect upon what multiple perspectives might have to offer.

I have fond memories of going to the library as a child and taking out books. I would fill up bags upon bags of books that were so full and so heavy that I could not even carry them. Even through my undergraduate and graduate studies, I continued to pile stacks upon stacks of books, and to fill bags upon bags of books, for both school assignments and out of interest in wanting to read and to learn. I find there is something comforting and also so magical about reading, and I continue to carry with me a love for learning through reading. I appreciate the aesthetics and the artistry of books, the diversity of genres and styles of composition through which understandings and experiences can be shared, and the ability to be able to pause and reflect on words and phrases to consider how the world might, or could be, other than what we think we know it to be.

In addition to my interest in reading and the practice I have had with reading extensively, I have also always loved the challenge of working on projects that included designing and constructing something. I enjoy engaging in analytical and creative thinking to assess a challenge and to try to find solutions. There are many projects I have engaged in over the years that I realize have highlighted unique skills and interests I have in design and construction. I remember building a birdhouse that I could hang in the tree, learning to sew a drawstring bag as a beginner learning to use a sewing machine, and I remember, in particular, designing and building a large trebuchet-style catapult for a high school physics course that was able to successfully hit a target multiple times. To this day, I continue to enjoy the challenge of attempting to design and craft something, including developing and deconstructing recipes when cooking and baking. I enjoy the challenge of cooking from scratch and making decisions based on cumulative understandings of how different ingredients might react with one another. I love the problem solving and the creative thinking that all of these types of tasks engage, and I appreciate and respect the commitment and perseverance it takes at times to find suitable and successful solutions based on learning that transpires through both research and experience.

My combined interests in reading, analytical thinking, and creative problem solving became the foundation of the two teachable subjects, English and mathematics, that I focused on when pursuing a Bachelor of Education. This somewhat unique blend of teachables at the secondary level reflects my appreciation of what different lenses and different ways of viewing and making sense of the world have to offer. I enjoy the challenge of remixing knowledges and skills to be able to learn and experience the world in novel ways. My undergraduate studies and my master's were based in English language and literature studies, and this provided a strong foundation for my interest in literacy education in particular. My interest in design and construction and in working with both qualitative and quantitative forms of analysis and representation helped me navigate educational measurement research in particular though. Conceptualizing forms of engagement through a literacies lens aligns with my preferred ways of making sense of the world as a text to read. I recognize that there are many other lenses through which engagements could be categorized and explained though, and I continuously strive to draw upon multiple resources and diverse perspectives to inform research and decision making.

Throughout this study, I have drawn on a diversity of knowledges and skills to be able to comprehensively assess a high-stakes standardized literacy test. Although the construct analysis

that frames the study and the outcomes analysis might facilitate different reading experiences, they are both the result of extensive textual analysis that is based on layering multiple texts and performing numerous critical re-readings from an interpretivist and qualitative standpoint. The different methods used in each of these parts of the research were an appropriate fit for the inquiry at hand. The qualities and values I bring to this research are evident in all of the work that follows in terms of the critical questioning and re-questioning, the complex methodologies used, the thoroughness of the analysis and interpretive readings, the performative structuring of the study, and the commitment to sharing stories that can potentially have a positive impact and inspire positive change for literacy education.

Connecting With the Research Topic and Objectives. In addition to reflecting on the values and qualities that I bring to this research, while both designing and conducting this research, I also reflected upon my own experiences with literacy education and assessment, and with standardized testing in particular, since literacy assessment is the focus of this study. I also reflected on my experiences with critically engaging with education. Critical engagement with education is one of the primary objectives of this study.

My experiences as a teacher candidate inspired my interest in wanting to learn more about assessment and educational measurement. As a teacher candidate, I recall puzzling over the feat of trying to construct high quality assessment tools for quite some time. I recall, during a practicum placement, working with high school students to collaboratively define evaluation criteria while attempting to co-construct a rubric for an essay assignment. My goal was to prompt students to think about what a high quality essay might entail and for them to think critically about what might be expected of them as writers and what they might want to reflect on while writing their essays. Constructing literacy assessments requires knowledge about both measurement and literacy. I recall it be particularly challenging for students to identify and suggest criteria upon which the assessment could be based.

I also remember having the opportunity to design a test during a practicum placement that was going to be used following the completion of a unit of study. I found it difficult to decide what to include on the test, since so much was covered in the unit. I was not sure what types of questions would be most effective or how many questions would be best. I wanted to be sure that students would have sufficient opportunities to demonstrate their knowledges and skills. Any of the versions of the test I came up with seemed limited in some way in its capacity to be able to

provide students with a meaningful educational experience and also provide data that could be used to represent students' achievement in relation to the unit of study. This exercise in test development encouraged me to consider what it means to collect representative data to be able to make a claim about a students' achievement. I also realized that a considerable amount of thought and decision making is involved in designing tests and also in evaluating test performances. Although there are differences between classroom assessment practices and standardized testing practices, in each case there is a literacy construct being assessed through particular methods, evaluation criteria that are constructed, and performances that are judged by an evaluator. This teaching challenge inspired my interest in wanting to learn more about how to design and also assess the quality of assessment tools to ensure they align with and support educational goals. I continued to reflect on many of the initial questions I had about how to construct meaningful assessment opportunities when conducting this research.

While conducting this research, I also had the opportunity to reflect on my own experiences as a student who has participated in EQAO's testing programs. While these experiences were not necessarily what prompted me to focus on testing in Ontario, reflecting on my own experiences as a student provided me with a unique critical lens through which I could consider this research. In Grades 3, 6, and 9, I wrote the reading, writing, and mathematics achievement tests, and, in Grade 10, I participated in the pilot test of the OSSLT. Writing the OSSLT during a pilot year (2000-2001) means that there were no high-stakes comparable to those that students have been facing every year since. Thus, I recognize that my testing experience was different from those of the participants in this study in many respects. The specific reading and writing skills assessed through the OSSLT, and the standards and expectations of the test, do not appear to have changed since the inception of the test though. Related to this, as a student, I was also taught previous iterations of the Ontario curriculum. One of the biases I hold as a researcher conducting research on the OSSLT is that I have experience writing similar tests, and I am able to reflect upon a similar educational context as that of the participants.

While both designing and reflecting on this study, I also considered some of my volunteer experiences, including working with a youth program's initiative that focused on getting youth involved with their educational experiences. I also have experience helping with a multi-year event that addressed what it means to initiate change in a community with a focus on integrating engagement with issues related to social justice in the school setting. From these experiences, I

have seen what it looks like to have a team work together towards a common goal of enhancing education and what positive and generative spaces for youth in particular can look like. I have also participated actively with student associations, and I have worked on a number of projects at the university level to help improve students' educational experiences and learning environments. These projects focused on revisions to policies, the evaluation of program designs, reviews of educational services, the redesign of faculty structures, the allocation of resources, and more. I have witnessed changes occur, and I recognize the value of engaging students as a key stakeholder group when it comes to assessing the effectiveness of education systems. These values contribute to how this study has taken shape.

Designing Opportunities for Learning Through Research. Another way in which researchers can attempt to situate themselves in relation to their work is epistemologically. Epistemology is the study of "knowledge and its production" (Kincheloe, 2005, p. 8). How I conceptualize knowledge construction, and how I decided "what counts as knowledge and 'truth'" (Strega, 2005, p. 201), also influenced how I designed and conducted the research for this study. Rather than situating myself explicitly in one particular paradigmatic approach to research, I believe there are commensurate and compatible aspects of multiple paradigms that resonate with my thinking. I view knowledge as something that is constructed, always partial, and situated. I have drawn on aspects of constructivism, postmodernism, and poststructuralism to create a remixed and hybrid space in which I can conduct this research. Working within and across multiple fields of research and multiple discourse communities necessitates being "epistemologically humble" (Barone, 2008b, p. 38). I recognize and appreciate that there are multiple ways of knowing.

For this study, I found it helpful to think within interpretivist paradigms when making sense of what validity research could entail. Social constructivism emphasizes how the ways in which we come to learn are socially situated and subjective (Damico, Campano, & Harste, 2009; Furman, Jackson, Downey, & Shears, 2003; Graves, 2004; Mellor & Patterson, 2004). While social constructivism offers a way of understanding how learning can occur and how meaning is made, postmodernism then emphasizes that because of how we learn and make meaning, there can be multiple ways of knowing. For postmodernists, there is no "pursuit of 'true' meanings" (Coles & Hall, 2001, p. 114). Although there is a focus on "the collective generation of meaning among people" (Au, 1998, p. 299), the process is quite individualized. There is not necessarily a

collective or shared understanding (Liu & Matthews, 2005; O'Connor, 1998; Rosenblatt, 1995b). Postmodernists even reject attempts to create a metanarrative or grand narrative. There is no objective to organize meaning or understanding in any sort of "totalizing" manner (Butler, 2002; Grenz, 1996). Instead, multiplicities are accepted. Postmodernism introduces doubt and uncertainty in the equation to highlight how there can be "multiple interpretations of the same phenomenon depending on where one is standing" (Merriam, 2002b, p. 374) or multiple interpretations of a text (Rosenblatt, 1995b). Poststructuralists also do not strive for any sort of "interpretive closure" (Leggo, 1998, p. 187). Instead, knowledge constructed is recognized as being partial and limited. In an attempt to better understand how it is we come to know what we know, poststructuralist thinking is often aligned with a process of deconstruction and an attempt to become aware of influential social factors. Poststructuralist theories emphasize how all language use is interconnected, and how all texts are evidence of intertextuality. Leggo (1998), for instance, observes how "every text bears traces of other texts: citations, references, structural codes, allusions, phrases, images, generic conventions, themes" (p. 190). From this perspective, our knowledges and understandings can be viewed as a composite derived from multiple experiences and influences. One issue I have with these paradigmatic positions is that the individual is constantly positioned as someone that is constructed within particular parameters, and it is not part of these paradigms to articulate how individuals can progress or move beyond the confines of constructs. Lather (1991) and Creswell (2007) have also observed this paradigmatic limitation. The ways in which I designed and conducted this research, as well as how I chose to structure and present the findings, are reflections of what I privileged and prioritized, from a knowledge construction standpoint, for this study. I sought to create generative spaces, I worked with data intensively, and I used diverse analytical and creative problem-solving strategies to perform interpretive readings of texts. I also continued to ask questions, and I remained curious throughout the inquiry.

Framing the Inquiry With Broader Questions and Wonderings. Guiding this inquiry is an interest in understanding how literacy assessments might serve literacy education. I am interested in how knowledges and methods from both educational measurement and literacy research can be remixed to create a productive space for designing and assessing literacy assessments to ensure they support educational goals. Throughout this study, I considered how standardized testing is serving students' literacy education, and, although not the explicit focus of the research

questions, I wondered about the commensurability of literacies and standardized testing, I questioned the challenges of attempting to capture literacies as a construct for any assessment or measurement context, and I wondered why a minimum competency model in particular is being used to measure and report on literacy proficiency. I also considered how literacy education could potentially be enhanced by using assessments and assessment results. Reflecting on the methods being used to conduct this research, I also continually questioned what other methods could be used to effectively analyze both test constructs and the outcomes of using a particular assessment tool. In the conclusion of this study, I return to these questions and wonderings while reflecting on the findings of this study.

Reflecting on Tensions and Challenges. This study involved navigating a number of tensions and challenges. One of the most significant tensions was considering what might count as high quality research to both educational measurement and literacy research communities. My goal in designing and structuring this study was to prioritize methods that could potentially speak to each of these communities, and I considered what it would take for the research to be compelling and to communicate learning in a meaningful way to each community. Conducting research that draws from two discourse communities that are not often merged raises a number of challenges for establishing one's positionality as a researcher. Finding a hybridized space where literacy assessment research can be conducted was challenging. Throughout this study, I sought to construct spaces where the strengths and affordances of each community could be used to inform and enhance this inquiry. Creating a research space that draws heavily upon both discourse communities is, however, one of the strengths of this work.

I adopted particular analytical lenses while conducting this research to improve the chances that it could be meaningful in the context of both educational measurement and literacy research. In order to be able to critically analyze what a literacy test purports to be able to report on, I drew upon validity research to deconstruct and reconstruct constructs and construct samples. I used validity as a critical lens through which the test could be analyzed, since this is the language used in educational measurement and by test developers to assess and assert the quality of tests. I created spaces in which claims about what a test measures could be critically read alongside both the curriculum and current research. A clear understanding of the domain being measured is necessary to be able to construct and assess any measurement of a domain. Thus, I worked extensively with literacy research, and critical literacies research in particular, to understand how

a theoretical literacy construct could be defined as part of this study. Since standardized tests measure only a sample of a broader construct, determinations of what should be included in that sample, and any justifications for the selectivity of the construct, should be informed by research in the field relevant to the domain being measured, which for this study is literacy research.

I also designed this study with considerable intentionality so that I could attempt to guard against bias. Conducting research with a “confirmationist bias” (Kane, 2006, p. 22) is one of the criticisms of validity research, and, in particular, of the validity research that is conducted by test developers, since their objective is to be able to report and confirm the validity of using their test or the test scores produced using particular measurement tools. In contrast to verifying an existing expectation about the test, the questions and methods used to conduct this research primarily sought to make possible inquiry and learning about the testing practice and how it relates to the educational context and the broader domain being measured. I made purposeful decisions about how to situate this study and how to present the findings of the outcomes analysis so that there was a strong analytical foundation that could support and inform the focus and findings of the study. In the chapters that follow, I demonstrate how I balanced validity research with inquiry-based methods that were able to produce complex data to work with. This study is an example of how an inquiry-oriented approach to validity research can be implemented where learning is the objective.

Mapping the Dissertation

The following mapping provides an overview of how the study is presented. In Chapter 2, I address what accountability culture in Ontario looks like in terms of the OSSLT. A detailed overview of how the OSSLT operates is also presented. In Chapter 3, I present the validity lens that is being used to study the OSSLT. This is the conceptual framework being used to shape and inform this study. In this chapter, I demonstrate why an investigation into the consequences or outcomes of a testing program is necessary and why the findings from this type of research need to be included within a validity argument that is used to support and justify the implementation and continued use of a testing program. In Chapter 4, I analyze and evaluate the literacy construct of the OSSLT in relation to the Ontario curriculum. This critical review prefaces the research that follows. My focus for this study is predominantly on critical literacies, which are shown to be underrepresented in the OSSLT’s conceptualization of literacy despite being part of how literacies are being presented in the Ontario curriculum.

Following this framework, in Chapter 5, I present a detailed overview of the design of this study in terms of the methodology and methods shaping the research. The chapter begins with a presentation of the research questions alongside the theoretical framework, which positions the nature of this qualitative, multi-method study. The multiple case study model and how arts-based research practices are being used as part of the design of this study are also explained. I discuss both the methodological strengths and limitations of using these methods. I then present an overview of the data collection process including justifications for the research activities in terms of how they map onto the research questions. I also outline the recruitment practices and introduce the configuration of participants and research sites, and outline what the research process looked like at each site. Following this, I introduce the data analysis methods used, and I address issues related to data representation. To conclude the methodological framework, I consider what it means to assess the quality of the research focusing on (a) the design and construction of the study, (b) the role of the researcher, (c) the presentation and contextualization of the participants as cases, (d) the interpretive and analytical work conducted, (e) the representation choices, and (f) the purpose, use, and value of the research. Through this discussion, I address both the affordances and limitations of this study.

In Chapter 6, I introduce the findings of the research beginning with an overview of the ten cases informing this study followed by a more detailed presentation of three of the cases. Included in these detailed case overviews is a synthesis of what a participant shared in terms of how they were understanding and experiencing literacies in an educational context that included the OSSLT, as well as a synthesis of their understandings and their experiences of the OSSLT. Following this introduction to the individual cases, in Chapters 7 and 8, I present the findings of the multiple case analysis and the cross-case analysis that are informed by the ten cases. Findings are organized according to the two lines of inquiry shaping this study. A discussion of the findings is presented in Chapter 9 to illustrate how I would respond to the central research questions based on the findings of the study. Chapter 10 concludes the study with a list of the contributions being made and a list of recommendations based on the findings of the research, which are intended to initiate the design of an action plan for how the results of this research could be used in meaningful and productive ways to help improve the quality and effectiveness of literacy assessment and education in Ontario.

CHAPTER 2. CONTEXT: TEST-BASED ACCOUNTABILITY AND THE OSSLT

The Ontario Secondary School Literacy Test (OSSLT) is one example of a large-scale standardized test that is being used as part of a test-based accountability program in Ontario. In this chapter, I provide a brief introduction to accountability culture in Ontario as it relates to the OSSLT. I also present an overview of the testing program.

Accountability in Ontario for Literacy Education

In 1996, the Education Quality and Accountability Office (EQAO) was created (W. T. Rogers, 2013, p. 3; EQAO, 2013c, p. 5) in response to the Ontario Royal Commission on Learning's (1994) recommendation to implement province-wide literacy testing and to create an office that would manage these operations. Part of the Commission's proposal was "to check student learning at a few critical transition points and to assure the public that there was at least one common measure of achievement for all students at these points" (W. T. Rogers, 2013, p. 3). The Commission suggested that there was an important correlation between student achievement and the effectiveness of an education system (see Vol. IV/Ch. 19, Indicators of Quality section, para. 4). The need to build confidence in the public and to demonstrate evidence of the quality of the education system seems to have been the basis for the Commission's recommendations (see EQAO, 2011c). Today, these remain two of the Ontario Ministry of Education's goals (see OMOE, 2014a). Kane (2015a) suggests that test-based accountability systems are based in "a lack of confidence in the quality of our schools (Cronbach, 1995)" (p. 44).

The Commission also noted that "student achievement, crucial as it is, is not the only indicator of the quality of the systems, and it is not the only outcome for which the system is accountable to the public" (para. 8). Multiple sources of data are needed when assessing and reporting on the quality of an education system. EQAO similarly notes that "one would be hard pressed to find any person or organization in Ontario's education system, least of all EQAO, suggesting that provincial test scores should be the only—or even the most important—measure of accountability" (Desbiens, 2011, p. 2). EQAO's position seems to be that, within the assorted measures of accountability being used, it is important that there be "an independent gauge of how well students are actually acquiring the skills they need for success in all areas of learning and in life beyond school as a key element of that evaluation" (Desbiens, 2011, p. 2). EQAO

emphasizes being able to provide comparable data on students' achievement across the province in particular (see EQAO, 2014e, Why are EQAO assessment results important? section, para. 1). When the Ministry reports on the progress of their initiatives, they report on data collected through diverse means that address different aspects of the school experience (see OMOE, 2015d). In addition to the very specific data on student achievement constructed by EQAO, the OMOE also collects other data about the education system (e.g., class sizes) and students' experiences (e.g., credit accumulation and graduation rates and timelines). Achievement data is only collected from one source though. It is unclear what other sources of data are valued. EQAO even recognizes: "It's important to consider a wide range of achievement information to evaluate a student's learning" (Desbiens, 2011, p. 2). The American Educational Research Association (AERA) agrees that multiple measure of a student's learning are needed. AERA (2000) even argues that high-stakes decisions "should not be made on the basis of test scores alone. Other relevant information should be taken into account to enhance the overall validity of such decisions" (Protection Against High-Stakes Decisions Based on a Single Test Score section, para. 1).

The OMOE describes EQAO as "an arm's-length agency of the provincial government [that] provides parents, teachers and the public with accurate and reliable information about student achievement" (OMOE, 2015c). The mandate of EQAO is presented as follows:

- To evaluate the quality and effectiveness of elementary and secondary school education.
 - To develop tests and require or undertake the administering and marking of tests of pupils in elementary and secondary schools.
 - To develop systems for evaluating the quality and effectiveness of elementary and secondary school education.
 - To research and collect information on assessing academic achievement.
 - To evaluate the public accountability of school boards and to collect information on strategies for improving that accountability.
 - To report to the public and the Minister of Education on the results of tests and generally on the quality and effectiveness of elementary and secondary school education and on the public accountability of school boards.
 - To make recommendations, in its reports to the public and to the Minister of Education, on any matter relating to the quality or effectiveness of elementary and secondary school education or to the public accountability of school boards.
- (OMOE & EQAO, n.d., Agency's Legal Authority and Mandate section)

In Ontario, it appears that much of the work of being accountable is attributed to EQAO. In order to effectively assess the quality and the accountability of the education systems in Ontario, EQAO must do more than design, conduct, and report on standardized achievement tests for Grades 3, 6, 9, and 10 on reading, writing, and/or mathematics. EQAO (2015g) writes:

The agency is dedicated to enhancing the quality and accountability of the education system in Ontario and to work with the education community. This will be achieved through student assessments that produce objective, reliable information, through the public release of this information and through the profiling of the values and use of EQAO data across the province. (para. 1)

The decision to use a test-based accountability program reflects what type of knowledge is privileged and what methods are believed to be effective for acquiring that knowledge. Test results are a response to a very specific research question that can differ from accountability questions though (e.g., an investigation of students' achievement versus an investigation into the quality of an education system) (see Kane, 2002, 2006). The research questions used in test-based accountability programs in particular are extremely precise and elicit very particular types of data. The data produced through the standardized test may be an insufficient basis for making inferences about a broader educational context or even about students' literacy achievement or proficiency beyond the very particular testing context.

When tests are used for accountability purposes, especially in a high-stakes context, it is also important to be aware of the power inherent in the testing practice. Kane (2015a) explains that the pressures of accountability programs can influence the very contexts these programs are intended to study and report on. A test-based accountability program can change an educational landscape. Luce-Kapler and Klinger (2005) argue that "High-stakes testing must be accompanied by explicit efforts to ensure the tests either support relevant educational goals or, at least, do not limit the educational domains being taught" (p. 171).

About the OSSLT

In order to obtain an Ontario Secondary School Diploma (OSSD), students must meet a provincial literacy requirement. The literacy graduation requirement "is based on the expectations for reading and writing throughout the Ontario curriculum up to and including Grade 9" (OMOE, 2011b, p. 56). According to the Ontario Ministry of Education (OMOE, 2011b), "The purpose of the secondary school literacy graduation requirement is to determine

whether students have the skills in reading and writing that they will need to succeed in school, at work, and in daily life” (p. 56). The primary method of satisfying this literacy graduation requirement is the successful completion of the OSSLT. The OSSLT is “based on the expectations for literacy (reading and writing) across all subjects in *The Ontario Curriculum* up to the end of Grade 9” (EQAO, 2016e, p. 21). In the sections that follow, I present an overview of the OSSLT that addresses (a) test administration; (b) results and alternatives to the OSSLT; (c) test expectations; (d) test standards of achievement; (e) the literacy content of the test, in brief, with a more thorough presentation as the focus of Chapter 4; (f) test composition and content; and (g) scoring practices and evaluation criteria.

Test Administration. The literacy test is available in both French and English. The French literacy test is entitled the *Test provincial de compétences linguistiques* (TPCL). The French or English version of the literacy test is administered in schools based on the predominant language of instruction of the school (OMOE, 2011b). The reading and writing skills framing the literacy tests are the same for both the French and English versions of the test. Students typically write the literacy test for the first time when they are in Grade 10. Some students may be granted a deferral or an exemption though. EQAO (2016e) explains that if a student

either has not yet acquired a level of proficiency in English advanced enough to complete the OSSLT successfully or is unable to write the test because of illness, injury or other extenuating circumstances, the principal may grant a deferral for the current year in accordance with the EQAO deferral policy. (p. 21)

The OSSLT is typically administered once a year in either March or April. In 2013, the OSSLT was administered once in April and once in May as an exception because of multiple school closures due to inclement weather (EQAO, 2014d, p. 11). The OSSLT is a two and a half hour test divided into two sessions of seventy-five minutes each. There is a fifteen minute break between the two sessions. The OSSLT consists of one test booklet and a corresponding answer booklet for each of the two sessions. There is also a questionnaire. Students are given ten additional minutes to complete the questionnaire (EQAO, 2016c, p. 2).

Results and Alternatives. The literacy graduation requirement can be met in three different ways: the literacy test, the literacy course, or through an adjudication process. In EQAO’s technical reports, it erroneously states: “Successful completion of the OSSLT is one of the 32 requirements for the OSSD” (EQAO, 2015f, p. 2; see also W. T. Rogers, 2013, p. 29). The

OSSLT is one way of meeting the literacy graduation requirement, but successful completion of the test is not the requirement.

There are two possible test results: successful or unsuccessful (EQAO, 2014e, How are EQAO results reported?: OSSLT section). Students also receive a specific score “on a scale from 200 to 400, in which 300 is the minimum score required for a successful outcome” (EQAO, 2011e, p. 3). Deciphering what a scale score of 300 means for students though is quite complicated. There are a total of 81 possible score points that can be earned on the OSSLT, and EQAO uses item response theory to move from rubric codes to score points and then to scale scores (see EQAO, 2011e, p. 4). According to EQAO (2011e),

Two students with the same total number of score points may receive different scale scores because they have answered different questions correctly. Three factors explain this variation in scale score: some questions are more effective measures of literacy than others, some are better at distinguishing between students’ achievement at the low end of the scale and other questions are better at distinguishing achievement at the high end of the scale. (p. 4)

Converting a score of 300 into a different numerical context, such as levels or percentages, which are both used in Ontario achievement charts, is not an easy task. As EQAO explains, “Since the scale does not start at zero, scale scores cannot be converted to percent. Each scale score represents a position along the continuum of student achievement rather than the number of points out of 400” (EQAO, 2011e, p. 4). EQAO does, however, note, “In order to achieve a scale score of 300, students are required to earn approximately 70% of the score points available on the test” (EQAO, 2011e, p. 3). In other words, a successful result is representative of scoring approximately 70% or higher on the test. This can be achieved by earning approximately 56-57 points out of the possible 81 points, which means this is more than a simple passing grade of 50%. EQAO notes though that “[t]his 70% must be interpreted in relation to the challenges posed by the questions on the test; it is not equivalent to a grade of 70% for a secondary school English course” (EQAO, 2011e, p. 4). In a course, achieving 70% is representative of having demonstrated ‘considerable’ knowledge and skill (OMOE, 2010b, p. 24), and 70% is a Level 3 on Ontario’s achievement charts. Level 3 spans 70-79%, so the achievement level could also be characterized as a Level 3- or the lower parameter of achievement at this level (see OMOE, 2010b, p. 40). Level 3 proper would be 73-76% and Level 3+ would be 77-79% (OMOE, 2010b, p. 40). As will be explained in the following section, the standard of achievement for the OSSLT, meaning what the approximate 70% stands for, is not representative of being able to demonstrate

considerable knowledge and skill. It is unclear what the OSSLT's standard of achievement (the scale score of at least 300, or earning approximately 70% or more of the score points) is representative of in the context of how achievement in Ontario is understood.

An Individual Student Report (see EQAO, 2015n) is provided to all students who write the OSSLT. This report includes the student's scale score out of 400 and a result of successful or unsuccessful. The report also includes a section entitled, "Understanding your OSSLT results" (EQAO, 2015n). The report explains to students: "Your results show that, in reading, you . . ." or "in writing, you . . ." followed by a list of the six skills students are expected to demonstrate on the test, which are preceded by either "are able to" (EQAO, 2015n) or by "need to improve" (EQAO, 2015n). The Individual Student Report also includes a list of next steps.

The purpose of beginning to administer the literacy test in Grade 10 is so that additional support can be provided to students who are not demonstrating sufficient proficiency. EQAO explains to test takers, "Writing now [in Grade 10] gives you time to get help if you need to improve your reading and writing skills. If you do not pass the OSSLT this year, you will have opportunities to retake it in future years" (EQAO, 2016a, p. 6). In a question and answer sheet for parents, EQAO notes, "For students who are unsuccessful on the OSSLT, it is particularly important for teachers and parents to discuss how to work together to close learning gaps before the end of high school" (EQAO, 2015m). According to the OMOE (2011b):

School boards are required to provide remedial assistance for students who do not complete the test successfully. This remedial assistance should be designed to help students improve their skills so that they are better prepared to retake the literacy test. For example, a board could offer a credit course on learning strategies (see the guidance and career education curriculum policy document) or one on literacy skills (see the English curriculum policy document) for these students. (p. 58)

On their website, EQAO profiles how schools are putting 'data into action' by using the test results to inform pedagogical practices in an attempt to increase student achievement (see EQAO, 2015q). Examples include mentorship programs, reading programs, mock literacy tests, and the creation of specific school improvement plans to name a few of the initiatives that were profiled in 2015 (see EQAO, 2015q).

Although a single test is being used to make a high-stakes decision, which is not in line with the guidelines of AERA (2000), EQAO has made it possible for students to be able to rewrite the test and/or to achieve the requirement through alternative means. According to AERA (2000):

As a minimum assurance of fairness, when tests are used as part of making high-stakes decisions for individual students such as promotion to the next grade or high school graduation, students must be afforded multiple opportunities to pass the test. More importantly, when there is credible evidence that a test score may not adequately reflect a student's true proficiency, alternative acceptable means should be provided by which to demonstrate attainment of the tested standards. (Protection Against High-Stakes Decisions Based on a Single Test section, para. 1)

The successful completion of the literacy course is an alternative method for satisfying the graduation requirement. The literacy course is open to Grade 12 students who have failed the literacy test at least once, but Grade 11 students may be able to enrol in the course after unsuccessfully completing the literacy test in Grade 10 (OMOE, 2011b, p. 58). Failing any improvement in students' demonstration of their literacy skills when rewriting the literacy test, the literacy course is relied upon as the most explicit and structured form of "intensive support" (OMOE, 2003a, p. 3) that is made available to students. According to the OMOE, "The credit earned for successfully completing the OSSLC may also be used to meet the Grade 11 or the Grade 12 compulsory credit requirement in English or to meet the Group 1 compulsory credit requirement for the Ontario Secondary School Diploma" (OMOE, 2011b, p. 58). In French schools, the successful completion of the French version of the literacy course can also be counted towards the Grade 11 or 12 credit for the course Français or the same Group 1 category (OMOE, 2011a, p. 67). The OSSLC curriculum, nevertheless, states, "Although this course is offered in Grade 12 and represents a credit awarded in Grade 12, the standard for a pass in the course is comparable to that established by the OSSLT, which represents achievement of Grade 9 literacy expectations" (OMOE, 2003a, p. 10). Thus, it is unclear how and why credit for this course can be counted in place of a Grade 11 or 12 English course credit.

Students who have not been able to satisfy the literacy graduation requirement through any other means might be eligible for an adjudication process. According to the OMOE (2011b):

School boards may establish adjudication panels at the end of the school year to provide students with an additional opportunity to meet the literacy graduation requirement. The process is designed for students who, through no fault of their own, have not been able to take advantage of the normal opportunities to write the Ontario Secondary School Literacy Test (OSSLT) and/or students who have not been able to enrol in or complete the Ontario Secondary School Literacy Course (OSSLC) because of unforeseen circumstances. (p. 59)

The adjudication process is an alternative option that is not listed in EQAO's primary documentation for students, parents, or teachers. When submitting an application to an

adjudication panel, a student must submit five pieces of writing that align with the types of writing samples students writing the OSSLT are asked to complete on the test. The written texts must have been completed independently by the student while “under the supervision of an Ontario College of Teachers (OCT) certified educator” (OMOE, 2015a, p. 2). This adjudication process has been referred to as a “portfolio adjudication” process (Kozlow, 2010, p. 1).

Test Standards of Achievement. The standards of achievement for the OSSLT have remained unchanged since they were first established in 1999 (EQAO, 2008a, p. 17; OMOE, 2015c, OSSLT section). Although the content expectations or content standards are listed for the OSSLT, the performance or achievement standards are not clearly stated. In the Individual Student Report, it is unclear what the “**minimum standard**” (EQAO, 2015n) of being “able to” (EQAO, 2015n) demonstrate each of the identified skills looks like. The literacy graduation requirement is determining the minimum standard of achievement that is expected of all graduating students in Ontario, and it is perhaps because of this that EQAO is characterizing the OSSLT as a “minimum-competency test” (EQAO, 2015m). EQAO claims that the OSSLT “measures whether or not students are meeting the minimum standard for literacy across all subjects up to the end of Grade 9” (EQAO, 2015h). The literacy graduation requirement is aligned with the Ontario curriculum though, which demands quite a bit from students.

In Ontario, a leveled grading system is used to assess and evaluate students’ achievement. There are four levels of achievement. Level 1 is understood as a passing grade, but Level 3 is an acceptable standard of achievement. According to the OMOE, “Level 3 represents the provincial standard for achievement” (OMOE, 2010b, p. 18). This level of achievement is said to indicate that students “will be prepared for work in subsequent grades/courses” (OMOE, 2010b, p. 18). According to the OMOE, “Strong literacy skills by Grade 10 are essential for students success and a good indicator of on-time graduation” (OMOE, 2015c). A Level 1, in contrast, indicates that students “must work at significantly improving learning in specific areas, as necessary, if they are to be successful in the next grade/course” (OMOE, 2010b, p. 18). Level 1 corresponds with the range of grades between 50-59%, and Level 3 corresponds with the range of grades between 70-79% (OMOE, 2010b, p. 40). While EQAO’s Grades 3, 6, and 9 achievement tests are concerned with whether or not students are meeting the provincial standard in reading, writing, and mathematics, which is set at a Level 3, EQAO does not associate OSSLT test results with the leveled grading system.

The standards of achievement for the literacy test and the literacy course are supposed to parallel one another, since they are both regarded as equivalent alternatives for successfully meeting the literacy graduation requirement. Thus, it might be helpful to consider what the standards of achievement are for the OSSLC. The OSSLC curriculum was published in 2003, and it has not yet been revised and republished. Consequently, the OSSLC curriculum does not correspond with the revised standards for achievement, assessment, and evaluation for Ontario high schools, which were released in *Growing Success* (OMOE, 2010b). In the OSSLC curriculum document, percentage grades are used in the achievement chart to measure success in the course. Although not formally listed as levels, like in the later curriculum documents, there are four ranges of percentages in the OSSLC achievement chart. In the OSSLC curriculum (2003), the four ranges are 0-49%, 50-64%, 65-79%, and 80-100%. Thus, the Level 1 for the OSSLC corresponds with 0-49%, which are not passing grades, and a Level 3 for the OSSLC corresponds with 65-79%, which includes some performances that are now considered to be a Level 2. The descriptions and qualifiers used to explain what these grades mean are also different. For the literacy course, the lowest level of achievement reflects “*limited* reading and writing skills” (OMOE, 2003a, p. 11). A student who achieves at this level “may be *approaching* the level of literacy required for graduation but cannot be deemed to have met the requirement and does not earn a credit for the course” (OMOE, 2003a, p. 11). A student who achieves a level higher (what would be Level 2) is said to demonstrate “*moderate* skill in reading and writing. The student has *achieved* the level of literacy required for graduation, and earns a credit for the course” (OMOE, 2003a, p. 11). The third level of achievement represents “*considerable* skill in reading and writing. The student has *exceeded* the level of literacy required for graduation, and earns a credit for the course” (OMOE, 2003a, p. 11). The highest level of achievement also represents exceeding what is required. As noted, “A mark of 50 per cent represents both a pass in the course and the achievement of the literacy standard required for graduation” (OMOE, 2003a, p. 11). In *Growing Success* (OMOE, 2010b), Level 1 currently also represents *limited* and Level 3 currently also represents *considerable* knowledge and skills. What this means is that the standard of acceptable achievement in the literacy course compares to a current Level 1 percentage-wise (requiring a 50%) but not in terms of the qualifier. More than limited knowledge and skills are required in the OSSLC, since the course’s 50% is the lowest parameter of what just crosses the line into moderate skill. The literacy course does not require Level 3 performance,

which is the provincial standard of acceptable achievement. Since the standard of achievement for the literacy test is supposed to remain consistent with the standard of achievement for the literacy course, and vice versa, it can be inferred that the OSSLT does not require performance that meets the provincial standard of acceptable achievement either.

EQAO should clearly state what standard of achievement is required for the OSSLT, and how that standard continues to compare to current Ontario achievement charts. Currently, EQAO distinguishes their evaluation practice from those used elsewhere in the Ontario curriculum. In a description of their scoring tools and practices, EQAO writes, “The rubric codes are related to, but do not correspond to, the levels of achievement outlined in the achievement charts in the Ministry of Education curriculum documents” (EQAO, 2015f, p. 12). It is not clear why the literacy test requires more than *limited* knowledge, which is what the traditional passing grade for all courses represents (50%), but less than the provincial standard, which is the standard used to judge all other achievement on EQAO tests with the exception of the OSSLT.

Test Expectations. According to EQAO, the OSSLT is “100% based on *The Ontario Curriculum*,” and, as such, “no special preparation is required” (EQAO, 2015m). According to EQAO (2008a), “When teachers teach *The Ontario Curriculum* in their classes, their instruction includes the knowledge and skills related to reading and writing that the test measures” (p. 18). This is significant because students cannot ethically be assessed on something they have not had the opportunity to learn when there are high-stakes associated with test results, such as meeting a high school graduation requirement (AERA, 2000; EQAO, 2008a, p. 18).

The three reading skills measured by EQAO are: “understanding explicitly (directly) stated ideas and information; understanding implicitly (indirectly) stated ideas and information[;] and making connections between information and ideas in a reading selection and personal knowledge and experience” (EQAO, 2016a, p. 4). The three writing skills measured by EQAO are: “developing a main idea with sufficient supporting details; organizing information and ideas in a coherent manner[;] and using conventions (syntax, spelling, grammar and punctuation) in a manner that does not distract from clear communication” (EQAO, 2016a, p. 5). These six skills are described as being “required in school and daily life” (EQAO, 2016a, p. 5). EQAO also considers these skills to be “the basis for learning in all subject areas throughout both elementary and secondary school” (EQAO, 2016a, p. 6). The OSSLT’s reading and writing expectations (see W. T. Rogers, 2013, p. 11) are the same reading and writing expectations listed for the Grades 3

and 6 achievement tests. For the OSSLT, the expectations are mapped onto the Grades 7 to 9 curriculum to demonstrate that students continue to be expected to be able to demonstrate these particular six skills. How students are asked to meet these expectations looks different on the OSSLT, and the standards of what ‘successful’ achievement looks like on the OSSLT is uniquely determined, but the test expectations are the same.

Literacy Focus. The literacy graduation requirement, the literacy test, and the literacy course each have the word *literacy* in their names. However, both the OMOE and EQAO refer only to reading and writing skills. In a few instances, EQAO uses different qualifying terms to describe the types of literacy skills that the OSSLT assesses though. For instance, EQAO sometimes uses the term “basic” (EQAO, 2012g, p. 13; see also EQAO, 2015e, Quotes section) to report on the types of literacy skills that are being measured (see EQAO, 2012h, 2015e). EQAO has also made connections between the OSSLT and understandings of 21st century skills, which are also known as “essential” and “employability” skills (EQAO, 2012a, p. 120; see also EQAO 2011a, para. 2; Hunter, 2011, p. 2). EQAO also refers to the reading and writing skills they measure as “fundamental” literacy skills (EQAO, 2014e, Why are EQAO assessment results reported? section). The Ontario Royal Commission on Learning’s (1994) recommendation of implementing a literacy test was proposed as a mechanism for “assur[ing] the public that a high school diploma signals adult literacy; that no high school graduate is incapable of reading and writing well enough to communicate in a post-secondary classroom, on the job, or in order to meet the demands of everyday life as a citizen and voter” (Ontario Royal Commission on Learning, 1994, Vol. II/Ch. 11, Recommendation 51 – Assessment for graduation section). This testing practice was intended to ensure the public that a high school diploma was “a fundamental guarantee” of literacy achievement (Recommendation 51 – Assessment for graduation section). How literacy is being conceptualized in the context of the OSSLT is presented in greater detail in Chapter 4 as part of an analysis of the OSSLT’s construct.

Test Composition and Content. Each of the OSSLT’s test booklets is divided into multiple sections. Some of the sections focus on reading skills and others focus on writing skills. Each booklet contains, what seems to be, a balanced mixture of sections on reading and sections on writing. Reading and writing are not each worth 50% of a student’s total score though. The reading tasks account for approximately “53%” of a student’s “total literacy score” (EQAO, 2008a, p. 17). The writing tasks account for approximately “46%” of a student’s “total literacy

score” (EQAO, 2008a, p. 17). In total, there are approximately 35 reading items and 12 writing items (EQAO, 2008a, p. 16). Each student also completes between “7 to 10” field test questions, which are not counted as part of a student’s score, with the majority of these being multiple choice items and at most two open-response items (EQAO, 2008a, p. 16). These field-test items are said to account for less than 20% of the allotted testing time” (EQAO, 2011e, p. 1). Students do not know which items are field test questions and which items are operational. Only the operational items are counted in a student’s score.

For the sections of the test that focus on reading, each section begins with a text excerpt followed by questions. The OSSLT evaluates five different texts that students are asked to read and respond to. EQAO believes these texts are “representative” of the types of texts students are expected to engage with based on the Ontario curriculum (EQAO, 2008a, p. 10). Table 2 presents an overview of the texts and associated question types.

Table 2. *OSSLT Sections on Reading*

Text ^a	Length of Text	Questions (Quantity and Type)
Information Paragraph	225-250 words	6 Multiple Choice, 1 Open Response ^b
News Report	225-250 words	5 Multiple Choice, 1 Open Response
Dialogue / Conversation	225-250 words	4-5 Multiple Choice ^c , 2 Open Response
Real-life Narrative	550-600 words	9 Multiple Choice
Graphic Text ^d	Fewer than 150 words	6 Multiple Choice

Note.

^a Information about text types and the types and approximate quantity of questions can be found in EQAO’s (2008a) Framework for the OSSLT (p. 17) as well as in the Planning and Preparation Guides that are released annually (e.g., EQAO, 2016e).

^b Students are provided with six lines of space to respond (EQAO, 2008a, p. 16).

^c The dialogue reading section consists of five multiple choice questions; however, for the 2008 and 2014 OSSLTs, this section consisted of only four multiple choice questions (EQAO, 2008c, p. 11, 2014h, p. 13).

^d The graphic text “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3).

For the sections of the test that focus on writing, there are three types of tasks for students to complete: long written responses, short written responses, and multiple choice questions (EQAO, 2008a, p. 16, 2016e, p. 2). For the two long written responses, students are provided with a specific writing task. Students are asked to write a one-page news report, and they are asked to write a two-page opinion piece to be presented as a series of paragraphs. There are two short written responses, and, for each one, students are provided with a brief writing prompt and six lines of space to write a text. As noted in the instructions to students, “The lined space [provided] [. . .] indicates the approximate length of the response expected” (EQAO, 2016a, p. 3). Students

are instructed to “pay attention to clarity, organization, spelling, grammar and punctuation” (EQAO, 2016a, p. 3). There is space available within the booklets for draft work; however, there is a note that work in these spaces will not be evaluated. EQAO adopts the assumption that “writing on large-scale assessments does not allow for a complete revision and refinement process” and, consequently, “written work on the OSSLT is scored as first-draft (unpolished) writing” (EQAO, 2008a, p. 10). Students are, nevertheless, required to “demonstrate their ability to communicate ideas and information clearly and coherently” (EQAO, 2008a, p. 10). Although the forms in which students are expected to write are said to be “representative of those expected across subject areas in *The Ontario Curriculum* up to the end of Grade 9” (EQAO, 2008a, p. 10), the quality of writing expected on the test does not represent the writing process expected in the curriculum. The third type of task is the completion of eight multiple choice questions. These questions include a short text and a question about the organization or structure of the text, the creation of compound sentences, and/or grammar and punctuation questions (e.g., EQAO, 2015o, pp. 4-5, 2015p, p. 3).

Scoring Practices and Evaluation Criteria. Students’ performances on the OSSLT from schools across the province are evaluated and scored centrally by trained professionals with the exception of the multiple choice items, which are machine-scored (EQAO, 2008a, p. 28, 2015f, p. 12). A decentralization of this process is occurring as EQAO moves towards both an online scoring process and an online literacy test (see EQAO, 2014b; Shulman, 2014). EQAO provides extensive information about their scoring practices in their technical reports (e.g., EQAO, 2015f). EQAO also releases a selection of test items that were administered each year with a set of rubrics and anchor responses. The anchor responses are sample scored responses accompanied by annotations that justify the score code attributed to the work. These resources illustrate how students’ performances on the OSSLT are being evaluated and scored. The released scoring guides also reveal how the generic rubrics (see EQAO, 2008a, pp. 28-31) that are associated with each type of test item are modified in practice. Table 3 illustrates which test items and accompanying scoring guides have been released each year from 2008 until 2015. EQAO released the full OSSLT that was administered with the accompanying scoring guides from at least 2008 until 2011. Since 2012, EQAO has begun only releasing a selection of the test materials. The documents with the released test items include a list of the unreleased sections though, so it is clear that the composition of the test continues to remain consistent.

Table 3. *OSSLT Released Questions and Scoring Guides*

	OSSLT Administration (Year)					
	2008 - 2011	2012	2013-A	2013-M	2014	2015
Reading Sections						
Info. Paragraph, 6MC, 1OR	Bk1: V	●	V	●	●	V
News Report, 5MC, 1OR	Bk1: I	●	I	●	●	I
Dialogue, 4-5MC, 2OR	Bk2: IX	IV	●	IV	IV	●
Real-life Narrative, 9MC	Bk2: VIII	III	●	III	III	●
Graphic Text, 6MC	Bk2: XI	VI	●	VI	VI	●
Writing Sections						
News Report, 1 page	Bk1: IV	●	IV	●	●	IV
Opinion Piece, 2 pages	Bk2: VI	I	●	I	I	●
Short Response 1	Bk1: III	V	III	V	V	III
Short Response 2	Bk2: X	●	●	●	●	●
MC Questions Set 1, 4MC	Bk1: II	II	II	II	II	II
MC Questions Set 2, 4MC	Bk2: VII	●	●	●	●	●

Note. Two OSSLTs were administered in 2013. There was one in April (2013-A) and one in May (2013-M); MC = Multiple choice; OR = Open response; Bk = Booklet; ‘●’ = The section was not released. Sources for the released question booklets and scoring guides: EQAO, 2008b, 2008c, 2009a, 2009b, 2010c, 2010d, 2011g, 2011h, 2012c, 2012d, 2013c, 2013d, 2013e, 2013f, 2014f, 2014g, 2015i, 2015j.

A review of both the generic rubrics (EQAO, 2008a) and the customized item-specific rubrics that have been released over the years (e.g., EQAO, 2013d, 2014f, 2015i) reveals that evaluation criteria generally include (a) completion of a response to some degree, (b) legibility, and (c) relevance. The rubrics used for open-response items in the reading sections seek evidence of “reading comprehension” as well as a degree of ‘accuracy’ and ‘specificity’ in responses (EQAO, 2008a, pp. 28). The customized item-specific rubrics further elaborate these criteria with an expectation that test takers (a) identify an idea or issue and/or provide some type of explanation or reasoning, (b) refer to information from the provided text, and (c) make connections between ideas, issues, explanations, or reasoning presented and the information being referred to from the text (see EQAO, 2013d, Scoring Guide for Reading Open Response: Sections I and V, 2014f, Scoring Guide for Reading Open Response: Section IV, 2015i, Scoring Guide for Reading Open Response: Sections I and V). This elaboration helps clarify what a demonstration of reading comprehension might look like.

The topic development rubrics used for the long written responses seek a response that (a) relates to the provided prompt(s); (b) presents a “clear and consistent” (EQAO, 2008a, p. 29) opinion for the opinion piece or event focus for the news report; (c) includes supporting details; and (d) demonstrates organization to some degree for all but the lowest score code (see EQAO, 2008a, pp. 29-30). On the 2014 OSSLT, the highest score code was awarded when evaluators

observed and judged that the following statements were applicable: “The response is related to the assigned prompt. A clear and consistent opinion is developed with sufficient specific supporting details that are thoughtfully chosen. The organization is coherent demonstrating a thoughtful progression of ideas” (EQAO, 2014f, Scoring Guide for Long Writing Topic Development: Section I). The rubrics used for the short written responses are vague in that they seek a “developed” response that includes a degree of ‘clarity’ and ‘specificity’ in the presentation of ideas and information (EQAO, 2008a, p. 31). The customized, item-specific rubrics for these short written responses include an elaboration that suggests the need to identify, describe, and/or explain something with supporting details. For all but the lowest score code, evaluators expect an explicit connection to be made between the supporting information and the statements being presented (EQAO, 2013d, 2015i, Scoring Guides for Short Writing Topic Development: Section III). For the rubrics on the use of conventions (see EQAO, 2008a), evaluators expect ‘accurate’ and ‘consistent’ application of ‘rules’ (EQAO, 2015i, Scoring Guide for Short Writing Conventions: Section III). Multiple choice questions for both the reading and writing sections are evaluated as being either correct or incorrect.

The evaluation criteria for the literacy test are supposed to correspond with the evaluation criteria used in the literacy course; however, there are a few significant differences. The literacy course, for instance, refers to “self-assessment skills (e.g., setting goals for improving reading and writing skills; reflecting on and assessing progress)” (OMOE, 2003a, p. 16), which are not listed in the OSSLT scoring guides. The literacy course also includes “revision” (OMOE, 2003a, p. 17) as part of the writing process. The course specifies that students are expected to be “producing first drafts, revised drafts, and final polished pieces” (OMOE, 2003a, p. 23).

There does not seem to be a document outlining the evaluation practices of the adjudication process. The OMOE states that one of the responsibilities of an adjudication panel is “ensuring that the standard for meeting the literacy graduation requirement through the adjudication process is comparable to that established by the OSSLT and OSSLC” (OMOE, 2015e, p. 3).

When assessing the quality of the OSSLT, it helps that there is quite a bit of information available. There are gaps in the information provided (see EQAO, 2015f) to be able to accept claims regarding the validity of this program though. In the chapters that follow, I illustrate why a more thorough presentation of the test’s literacy construct in particular is necessary.

CHAPTER 3. CONCEPTUAL FRAMEWORK: VALIDITY

Throughout this study, I present a focused and partial critique of a test in an effort to demonstrate what an alternative inquiry into the validity of a testing program could look like. The conceptual framework for this study is focused on validity because that is the language used and the methods presented for asserting and justifying the quality of the high-stakes standardized test being reviewed. I focus on validity not only because that is the language and framework used to discuss the quality of the literacy test being analyzed but also because there is a need to continue to challenge and to remix how validity research is being conducted to elevate the state of the field. Many qualitative researchers have considered rejecting the use of the term *validity* in the context of qualitative research (see Eisner & Peshkin, 1990; Kincheloe, 2005; Huot, 2002; Lather, 2007; Lynne, 2004; Wolcott, 1990) because of the term's positivistic roots. However, Lynne (2004) writes, "Going off in our own corner and developing a paradigm by ourselves will not result in a shift that matters to anyone but us" (p. 114). In this chapter, I present a hybridized concept of validity that draws on a unique selection of knowledges. I have designed a theoretical and methodological approach for validity research that draws on a selection of interdisciplinary insights, including educational measurement research, critical literacies research, and qualitative research. The outcome is the creation of a space that makes it possible to question the role of interpretation and to work with alternative notions of representation. These are just two of the unique affordances of the conceptual framework presented in this chapter. In this chapter, (a) I introduce validity as a subjective judgement of quality, (b) I rewrite validity research as inquiry, and (c) I explain why this instance of validity research into the outcomes of using a high-stakes literacy test is based on extensive construct analysis. I conclude the chapter with a discussion of the need for cases of qualitative validity research.

Validity as a Subjective Judgement of Quality

I understand validity as a qualifier that can be rendered as a judgement that is formed through an evaluative process. Validity is a judgement that refers to the extent to which measurements, as well as decisions made based on those measurements, can be trusted and acted upon. For instance, one might say that a particular test use and/or test score use is valid. This understanding of validity is compatible with how validity is conceptualized by many educational measurement scholars (e.g., Cronbach, 1988; Kane, 2002, 2006, 2012a, 2012b, 2013b, 2015b; Messick, 1988,

1989, 1995a, 1995b, 1998; Moss, 1992, 1995, 1998, 2003, 2007; Shepard, 1993, 1997, 2013). Validation is a decision-making process that is based on values about what counts and what will be accepted. There is no absolute of what stands as quality; instead, quality is a construct established based on values and priorities that are contextually and subjectively determined. A validity judgement is, thus, necessarily subjective. It is evidence of bias with respect to what is valued and prioritized for a particular testing practice and in a particular context.

The focus of validity research tends to be on validating the use of a test in a particular context and for a particular purpose, or, in the case of Kane's (2012b, 2013b) approach, validating the use of test scores. Since tests can be used in different ways (see Moss, 2007), it follows that validity is not a characteristic or property of a test (see Messick, 1995a; Shepard, 1993). When validity is understood to be a contextualized and situated judgement, and one that is constructed in a potentially shifting context, it becomes easier to understand how validity arguments and judgments remain subject to change. Any validation process will also always be partial. Scholars working on testing tend to now hold "a more probabilistic and fallibilistic view of knowledge" anyway (Gunzenhauser, 2003, p. 53). Gunzenhauser (2003) states that there is less a masquerade about the objectivity of standardized tests and their results than there once was. Many educational measurement scholars understand that tests must be used with "caution" (p. 53), and that "a test should be one among many tools that schools use to evaluate students" (p. 53). Throughout this chapter, I unpack this understanding of validity, and I explain how validity as a concept and validation, or validity research, as a process and methodology relate to this study.

The challenge with working with validity as a concept is that it is largely about congruence and consonance. Validity strives for an allegiance to similarity, an acceptance of what is known, and a rejection of all that is other or that does not appear to fit or align accordingly. In many ways, validity functions as a reduction, or, at its worst, an eradication, of diversity. Validity is often and easily conceived of as a binary of something being valid or invalid. As such, one of the issues with using the term validity is that it is sometimes viewed as being "too high a standard" (P. E. Newton & Shaw, 2014, p. 3). It is perhaps more appropriate to think of a judgement of validity in degrees (see AERA, APA, & NCME, 2014, p. 11; Messick, 1989). A judgement of validity is an assessment of how close a testing practice is to achieving the idealized or perfected form of the practice. The ideal state presumably needs to be known, defined, and measurable such that a testing practice can be measured in relation to the ideal. In this sense, validity can be

viewed as a self-validating process. Whatever is established to be acceptable is what will be searched for and confirmed. In her work on decolonizing validity, Cushman (2016) explains:

[V]alidity as a self-identified knowledge points to its own utterance as proof of the claim for what counts as ‘true’ evidence and, in doing so, it always already creates the social hierarchy that places itself at the top – differencing, denigrating, dismissing, disrespecting, devaluing all other forms of law, religion, knowledge, and being as it does. (Legacies of Imperialism section, para. 5)

From this perspective, validity is a highly restrictive framework to work within conceptually. Cushman argues that validity can be conceptualized as a management tool. Scheurich (1996) also writes about validity in similar terms where the ‘Other’ must become the ‘Same’ (Scheurich, 1996, p. 54) to be something that the self-confirming system willingly accepts. The notion of an absolute and singular truth and ideal that excludes multiplicities and diversity limits what it becomes possible to know.

In the case of high-stakes standardized tests, and the OSSLT specifically, a cut score is established as a standard to define the baseline of what will be deemed acceptable. The performances that score at the cut score are the performances that precisely define the baseline of what constitutes sufficient proficiency. Achievement tests are not typically designed in such a way that they can effectively measure the range of performances that can be produced (see EQAO, 2011e). Instead, they seek to identify something particular. Decisions are pre-determined about what will be indicative of achievement and proficiency. According to Lynne (2004), testing practices originated from positivism, which focused on binaries, right versus wrong, and absolute truths that could be measured and known. Emphasis is not on seeking to learn about literacy potential from a test performance in novel ways. Evaluators are looking for something in particular, which narrows the scope of the evaluation. With a funneled evaluative lens, what is other becomes more difficult to work with, and what is other is easier to dismiss from consideration. Moss (1998) notes that the interpretations of test results that we construct become the means through which we define and represent ourselves. Recognizing validity itself as a construction and something that could be constructed otherwise is significant for this inquiry.

Cushman (2016) suggests a practice of “*dwelling in the borders*” as a resistance to adopting and conforming to any of the “current systems of assessment and knowledge making” (A Decolonial Option to Validity section, para. 3). Dwelling in the borders is an opportunity to “create a world in which many worlds coexist equally, in and on their own terms” (para. 3).

From this perspective, validity research would no longer strive to make “its own experience into a universal one, the baseline against which all Others are tested and their knowledges and languages are deemed deficit to” (para. 3). Instead, “validity measures would seek to identify understandings in and on the terms of the peoples who experience them” (para. 3). In the case of this study, validity research is an opportunity to re-evaluate education and evaluation systems through an attempt to understand the consequences or outcomes of those systems for the participants who engage with them. Rather than an evaluation that is based on pre-established knowledge, this study presents a method for inquiry.

Rewriting Validity Research as Inquiry

Validity as inquiry is about reading with caution, critical awareness, and a questioning stance. It is a process of seeking to understand by consulting multiple resources, investigating diverse forms of evidence or opportunities to learn, and reflecting on what is being learned. Positioning validity research as inquiry aligns with Moss, Girard, and Haniford’s (2006) call for a

flexible approach to validity that begins with the questions that are being asked; that can develop, analyze, and integrate multiple types of evidence at different levels of scale; that is dynamic so that questions, available evidence, and interpretations can evolve dialectically as inquirers learn from their inquiry; *and* that allows attention to the antecedents and anticipated and actual consequents of their interpretations, decisions and actions. (p. 111)

M. Davis and Yancey (2014) consider the work of Moss et al. (2006) to present an “integrative method” (p. 15). The inquiry presented in the chapters that follow strives to model this approach of asking questions, working with multiple sources of evidence, and gradually developing interpretations through extensive analytical work while maintaining a metacognitive and critical awareness of the process and methods being used and with what potential outcomes.

A Unified Concept of Validity

This study aligns with and expands upon modern and contemporary conceptualizations of validity. In particular, I draw upon Messick’s (1988, 1989, 1995a, 1995b, 1998) approach of unifying a concept of validity. Messick centralizes the construct and includes an analysis of consequences as a necessary part of the process of rendering a validity judgement. Constructs and consequences, or rather outcomes, are the two most significant aspects of this study.

What Is a Construct? A construct is a way of capturing and representing understandings of complex aspects of the human experience. Constructs are a way of conceptualizing and

theorizing identities and/or engagements. A construct can be composed of a myriad of potentially observable actions that together not only relate to but also collectively construct the theory or phenomenon being captured and represented. For example, if literacy is the phenomenon and theory of engagement that is being captured as a construct, listening, speaking, reading, writing, drawing, designing, and so on might all be conceptualized as parts of this construct. Each of these actions might also be elaborated further to explain through theorizing, as well as through practical applications, what listening, for instance, can entail.

Test constructs are often used as a construct of competencies. They attempt to holistically capture an idealized identity of who can be competent, in what domains, and what that can look like. In the *Standards*, the term *construct* refers to “the concept or characteristic that a test is designed to measure” (AERA et al., 2014, p. 11). A “detailed description” of a construct is said to provide “a conceptual framework for the test, delineating the knowledge, skills, abilities, traits, interests, processes, competencies, or characteristics to be assessed” (p. 11). A test construct is a selective, and sometimes representative, sampling of a broader construct. The test construct always needs to be justified as an appropriate sampling and limiting of the broader construct though. Because test constructs tend to focus on what is observable, the limitations of testing methods can pre-emptively limit a test’s construct sample.

This conceptualization of constructs differs a bit from that presented by Kane (2013b). Kane distinguishes between constructs that are theory-based and those that are not. He writes:

We have some constructs that are embedded in theoretical networks that provide much of the meaning of the construct. At the other extreme, we have, for example, the written part of driver’s license tests, which would include questions about things that every driver should know (e.g., the meaning of street signs, the rules of the road). The driver’s license test covers a domain of facts, principles, and rules that are generally related to safety, but otherwise are quite diverse. It serves an important function, but to assume that it measures a theoretical construct would be quite a stretch” (Kane, 2013b, pp. 67-68).

In contrast to Kane, I would argue that all constructs have an aspect of theorization to them, and the development of any construct is a theorization. Even in the case of a driver’s licence test, there is an overarching theory under which all of the related domains of driving and the practical skills and context-specific rules can relate to determine what constitutes sufficient proficiency to be able to drive based on a society’s standards of what is acceptable. A theoretical construct of what being proficient and sufficiently competent in driving looks like can be established as the foundation of a driver’s test in the same way that a construct of what being proficient and

sufficiently competent in literacy looks like as the foundation for a literacy test. When there is anything about the human existence where there is any skill, ability, domain of knowledge, form of engagement, or identity, there is a related construct. If an evaluator is interpreting and judging, they must have a frame of reference that shapes their understandings and is representative of what they value and prioritize in particular contexts. Because of how constructs come to be designed and determined, the significance of power, privilege, and access to determine and shape these constructs, as well as to evaluate and revise these constructs, cannot be overlooked.

Constructs are value-based and performative (McNamara, 2006). Constructs are not absolutes.

Kane demonstrates reluctance to using the term *construct* given the lack of clarity with regards to how the term has come to be used in validity research. Kane (2013b) writes:

I don't use construct language much, because I do not find it useful. Note that I am not objecting to the ideas embedded in the construct-validity model. Rather my problem is that the word, "construct" has acquired so many meanings that it is no longer clear what it means, and in many cases talk about "constructs" and "construct definitions" masks the fact that what is being measured is not well defined. (p. 67)

I use the term *construct* a lot throughout this study, and it resonates well with the ways in which I understand the constructed nature of our world, including how assessment and evaluation theories are designed and used. I present an understanding of what a construct is, a methodology for investigating constructs, and specific examples of literacy constructs that are derived from and designed based on current research, the relevant curriculum, and the test being analyzed.

Centralizing the Construct. Messick's work (1988, 1989, 1995a, 1995b, 1998) was the most comprehensive attempt at making a shift towards a unified concept of validity that centralized the construct and also included considerations of consequences as part of a validity judgement. Focusing on a unified concept of validity and a centralized construct seems to have been a cumulative remixing and enhancement of the work of many scholars over the years. Cronbach and Meehl (1955), for instance, developed a construct model; however, the model they proposed was typically used when no other model could be used (see Kane, 2012b, pp. 6-7; Moss, 2007, p. 472). Their construct model was presented as just one possible approach to validation (see Kane, 2012b, p. 7) that could provide one type of evidence to inform a validity judgement. Whereas Cronbach and Meehl (1955) viewed construct validity as one of many possible types of evidence, Messick's conceptualization of validity prioritized a centralized and always relevant construct. For Messick, all forms of validity evidence relate to a test's construct in some manner,

and considerations of the test's construct must always be included in a validity judgement. In this sense, Messick proposed the "general organizing framework for validity" (Kane, 2012b, p. 7) that was missing from Cronbach and Meehl's construct model.

Cronbach and Meehl's construct model emphasized the importance of identifying what would be measured though. Their model was at once praised and also critiqued for how rigorous it was with regards to systematically defining a theoretical foundation for a testing program (see Kane, 2012b; Moss, 2007). One of the challenges of the model was that it "assume[d] the existence of a well-defined theory from which empirical predictions can be derived" (Kane, 2006, p. 20). As Kane (2015b) observes, the "applicability" of Cronbach and Meehl's construct model "was hampered by the fact that most of the attributes being 'measured' in the social sciences did not come with the kind of extended, well-defined theory on which the construct model depended" (p. 11). Although the need for a well-defined theory was accepted, the issue was that such well-defined theories did not always exist. The theoretical demands of the construct model "had to be loosened considerably" (p. 11) for the approach to validity to be considered relevant to educational measurement. Fixing a static construct might not be relevant for educational measurement where understandings of what is being learned, what it means to learn, and what it means to demonstrate learning continue to change; however, clarity with regards to the presentation of a test construct can always be demanded. For construct validity to function, there must be a clearly defined test construct as the foundation upon which an evaluation is based.

Also preceding Messick's work, Loevinger (1957) positioned construct validity as an overarching understanding of validity (see Moss, 2007). According to Moss (2007), Loevinger's work "prefigured the move toward a unitary concept of validity" (pp. 471-472). Different types of validity were beginning to be seen as all being related in some manner to the construct of a test, and, as Moss (2007) notes, Loevinger's argument was that "[o]nly construct validity [. . .] provided a scientifically useful basis for establishing validity" (p. 471). When a construct is flawed, the validity of the testing practice can be called into question because all aspects of a testing practice are interconnected. No argument for how strong the design of a test is can supersede challenges with a test's construct. Messick's centralizing of the construct echoes this.

According to Messick (1995a, 1995b), the two most significant threats to validity are construct underrepresentation and construct-irrelevant variance. Construct underrepresentation means not enough of the construct is being measured. For example, when assessing reading

comprehension, focusing on only vocabulary, or when assessing writing, ignoring process work, such as drafting and editing, would constitute construct underrepresentation. In the case of a literacy test, if the literacy construct is too narrow, it is possible that students who have literacy skills that are not being assessed on the test are receiving a score that is not representative of their capabilities. The problem is that “low scores should not occur because the assessment is missing something relevant to the focal construct that, if present, would have permitted the affected students to display their competence” (Messick, 1995a, p. 7). Construct irrelevance means too much that is not part of the construct is being measured. For example, a reading comprehension test that is timed is also evaluating a student’s ability to work quickly and under pressure, which are not necessarily literacy skills. A student’s performance on a timed version of a test might not be comparable to their performance on the same test when untimed. Construct irrelevance is considered the extent to which “test scores may be systematically influenced [. . .] by processes that are not part of the construct” (AERA et al., 2014, p. 12). Construct underrepresentation and construct irrelevance, which the *Standards* also parenthetically refer to as “*construct deficiency*” and “*construct contamination*” (AERA et al., 2014, p. 12), “are always present to some extent” though (Hubley & Zumbo, 2011, p. 221). Hubley and Zumbo (2011) note that “the goal is to minimize their presence” (p. 221).

The Inclusion of Consequences. Messick (1988, 1989, 1995a, 1995b, 1998) has done extensive work to challenge the educational measurement community to consider the ethical implications of assessments. Messick (1998) argues that “several complementary forms of evidence” (p. 1) need to be considered when making a validity judgement, and this includes the consequences of test use. The consequences of testing are often characterized as intended or unintended, as anticipated or unanticipated, and/or as positive or negative. There are many binaries established to categorize and judge consequences. Rather than focusing on consequences as products of cause-effect relationships that can be proven within closed and controlled systems, this study focuses on outcomes more generally that arise within a context that includes testing. This study seeks to describe, reflect upon, and assess the present as a culmination of a multiplicity of simultaneous experiences and processes.

There has been a significant shift in validation research insisting on the inclusion of consequences when evaluating the validity of a test (see Kane, 2006; Linn, 1997; Messick, 1988, 1989, 1995a, 1995b, 1998; Moss, 1998). Many scholars argue that test developers and test users

have a responsibility to be aware of, and to respond in action to, the consequences of their testing practices (see Cronbach, 1988; Downing, 2003; Kane, 2006, 2013b; Hubley & Zumbo, 2011; Lane, 2012; Lane et al., 1998; Linn, 1997; Messick, 1988, 1989, 1995a, 1995b, 1998; Moss, 1998; Shepard, 1997; Tittle, 1989). The *Standards* (AERA et al., 2014) also support the inclusion of consequences as part of the process of validating the use of a testing program.

Some educational measurement scholars disagree with the argument that consequences fit within a broader context of validity though (see Borsboom, Mellenbergh, & van Heerden, 2004; Cizek, Bowen, & Church, 2010; Green, 1998; Lees-Haley, 1996; Lissitz & Samuels, 2007; Mehrens, 1997; Popham, 1997; Reckase, 1998). Scholars, such as Green (1998), Lees-Haley (1996), Mehrens (1997), Popham (1997), and Reckase (1998), argue that consequences should be assessed and reported separately from a statement about the validity of a test. These scholars seem to believe that it is possible to make a validity judgement about a test as a product with an intended use that stands independent from any actual implementation of the practice. Scholars who resist the inclusion of consequences tend to separate the responsibilities of the test developer from the test user (see Kane, 2001, p. 338; Stobart, 2001, p. 28) when they suggest that a validity judgment about a test can be made without considering test use consequences.

Investigating consequences is demanding work, and this is one of the most significant criticisms of Messick's unified concept of validity, which integrates an analysis of consequences as a necessary part of the process of rendering a validity judgement. Hubley and Zumbo (2011) recognize that many "detractors" claim "that examining social consequences is too great burden" (p. 229). Even some of the researchers that support Messick's work remain critical of how this type of work can be achieved in practice. Brennan (2006), for instance, observes that Messick does not offer "a treatment of validity that provides much specific guidance to those who would undertake validation studies" (p. 2). Kane also notes that the unified concept of validity does "not provide clear guidance for the validation of score interpretation or uses" (p. 7). Instead, according to Kane (2013a), Messick's unified model "placed very heavy demands on the validator, who was to consider multiple theoretical perspectives and to develop multiple lines of evidence for the proposed interpretation and use of the test scores" (p. 450). According to Kane (2012b), "The unified model of construct validity was conceptually elegant, but not very practical" (p. 7). Kane (2012b) is fairly critical of Messick's unified model because, in "the absence of strong theories" (p. 7) to support how a particular construct can be effectively

measured, which was the foundation of Cronbach and Meehl's (1955) construct model that researchers found difficult to implement in practice, a test construct "tends to be very open-ended" (Kane, 2012b, p. 7). The issue with not only a less rigidly defined construct but also the inclusion of consequences as part of validation of the use of a test is that "it is not clear where to begin" (Kane, 2012b, p. 7), and there are no specified "criteria for gauging progress and deciding when to stop" (Kane, 2012b, p. 8). Some of these critiques seem to be based on feeling overwhelmed by the possible wealth of diverse forms of data that can be, and effectively need to be, collected and analyzed such that a validity judgement can be stated. Part of the resistance to working with a unified concept of validity is perhaps because it becomes difficult to ever complete the validation work. There is always more to learn about a testing program. According to Kane (2013b) "the use of construct language can lead us to engage in an unending process of checking a loose but extended network of relationships" (p. 68). Ultimately, it was not clear to other validity theorists how the unified concept of validity could be operationalized into a set of methods to be able to effectively conduct validation work.

Just because validity work is demanding and there is no clear operationalization of a particular set of methods does not mean the work is not warranted or even required. As stated in the *Standards*, "It is commonly observed that the validation process never ends, as there is always additional information that can be gathered to more fully understand a test and the inferences that can be drawn from it" (AERA et al., 2014, pp. 21-22). What this means is that expectations might have to shift with regards to what it is possible to achieve through any particular validation process. The shift towards including consequences is representative of a shift towards more interpretivist paradigms for validity research and includes a recognition that complex contextual factors can be difficult to measure. Messick's (1989) emphasis that there are "many ways of accumulating evidence to support a particular inference" (p. 6) and that there are multiple possible sources from which researchers can gather validity evidence could be aligned with a postmodernist understanding of research due to the respect for multiple perspectives, multiple ways of knowing, and ongoing questioning. According to Moss (1998), "If we want to better understand the consequences of test use, we need to understand how individuals make sense of and use the products and practices of testing in their everyday lives" (p. 7). When Moss (1998) writes about investigating the consequences of testing, she is proposing "intensive, highly contextualized, sustained interpretive work" (p. 11). Because consequences can arise out of

uniquely contextualized engagements with a testing practice, not all consequences can be anticipated or known at any given time. It is not possible to ever fully understand and validate a testing program. However, when assessing the use of a testing program, judgements can be situated in terms of what is known in the moment and what potential consequences or perceived outcomes have been investigated and with what perceived results. A validation process is necessarily always incomplete. Rendering a judgement should always rest in a state of impermanence and be open to the possibility of change as contexts shift and thinking continues to develop. An acknowledgement and respect for incompleteness is humbly required alongside the intent and the effort to investigate critically and thoroughly in any given moment.

Working With an Argument-Based Approach

In addition to working with Messick's conceptualizations of validity research, I also draw on Kane's (1992, 2006, 2012a) argument-based approach to conducting validity research. The argument-based approach builds on Cronbach's (1988) conceptualization of validity arguments as evaluation (see Kane, 2001). Kane's argument-based approach to validity research is a two-step process that includes the development of two arguments (Kane, 2012b, p. 4). The first argument is an interpretation/use argument, which Kane also calls an "interpretive argument" (Kane, 2006, p. 23). This first argument provides a description and an explanation of how test scores are to be interpreted and used. In particular, this approach to validity research draws attention to the many inferences and assumptions that are made when interpreting and using test scores. Inferences that would need to be clearly stated and explained would include any move that is made between a test performance and a test score, which is also called a scoring inference, or any move that is made from a test score to an interpretation of the test score, which, depending on the interpretation, might be called a generalizability inference or an extrapolating inference (see Kane, 2013a). The second argument is a validity argument, which provides an evaluation and a judgement regarding the quality of the first argument. The argument-based approach to validity research is about stating a measurement proposal and then evaluating the "plausibility" of that proposal (Kane, 2012b, p. 4).

The argument-based approach to validity research is not without its flaws though, and this study departs from this approach to conducting validity research in a few significant ways. The following are a few of the limitations with the argument-based approach that relate to what this study requires: (a) the scope of the investigation is too limited; (b) consequences are not

effectively integrated; (c) it is unclear how multiple stakeholders can engage with the proposed validation process; and (d) the process of developing the validity argument remains undefined. The argument-based approach also seems to be a performance; however, the relationship between the producer and consumer of the arguments is not characterized. The current study expands upon and remixes these aspects of Kane's work.

Scope of the Validity Investigation. Kane (2004) suggests the argument-based approach to validity research as a "methodology or technology for validation" (p. 136, as cited in Shear & Zumbo, 2014, p. 96). Whereas Messick's conceptualization of validity appeared to be open-ended and, thus, never-ending procedurally, Kane's argument-based approach appears to limit the scope of validity research. The validation process is confined to an investigation of what precisely is specified in an interpretation/use argument for a testing program. Because of the parameters that define the scope of the investigation, this approach can be considered to be comprehensive in that all interpretations and uses that are proposed will be evaluated, but the investigation must also be recognized as being partial and limited based on the completeness or thoroughness of the proposed interpretation/use argument being evaluated. Although the defined scope of the argument-based approach to conducting validity research appears to be a strength of this approach, it is arguably also one of the greatest limitations. When using this approach, the scope of an evaluator's analytical lens is narrowed to assess what is presented presumably by test developers and test users. Instead of tracing a network of inferences from proposed test score interpretations and uses, this study begins by directly questioning the test construct. This study demonstrates how beginning a validity inquiry with questioning, rather than only performing an appraisal (Kane, 2012b, 2013a), can also lead to a productive investigation into the validity of using a testing program.

Integrating Consequences. Despite being more of a methodological approach to conducting validity research, it is not clear how research concerning the consequences of testing is intended to be integrated within the argument-based approach to conducting validity research.

Consequences are not emphasized as an essential, or even necessary, part of the argument-based validation process. The effectiveness of an argument for test and test score use could be enhanced if it was supported by evidence-based research into the potential consequences of test and test score use; however, there is no requirement to include this type of rhetoric and research in either the interpretation/use argument or as part of the validity argument to support or

challenge test and test score use. Because the interpretation/use argument focuses on specified interpretations and uses of the test scores specifically, it is unclear how or when the potential consequences of engaging with any other aspect of the testing experience might be considered as something that reflects the quality and validity of the testing program.

Engaging Multiple Stakeholders. This methodology seems to function best if the test developers and test users are the ones to initiate the validation process by providing an interpretation/use argument. According to Kane (2006), “in practice, most validation research is conducted by test developers and tends to have a confirmationist bias” (p. 22). The reason for this is that “[f]alsification [. . .] is something we prefer to do unto the constructions of others” (Cronbach, 1989, p. 153, as cited in Kane, 2006, p. 22). Kane (2006), thus, recognizes that “at some point, especially for high-stakes testing programs, a shift to a more arms-length and critical stance is necessary in order to provide a convincing evaluation of the proposed interpretations and uses” (p. 25). Cronbach (1980) suggests that validation is about more than attempting to confirm the validity of a study. Cronbach (1980) writes, “The job of validation is not to support an interpretation, but to find out what might be wrong with it. A proposition deserves some degree of trust only when it has survived serious attempts to falsify it” (as cited in Kane, 2013a, p. 453). From a critical literacies perspective, validity research could be conceived of as a practice of not only, or even necessarily, seeking to falsify what is presented; instead, validity research could be understood in terms of seeking gaps or omissions that require critical attention. Validity research is about challenging the representation of a text as a particular construction, which, if constructed otherwise, might lead to a different validity judgement. From this perspective, a researcher is positioned more humbly. A researcher works in the balance of all knowledges rather than solidifying a particular position.

For Kane (2012b), validation is a process that includes both a “*developmental stage*” and an “*appraisal stage*” (p. 4). The first stage is the development of the assessment tool and the alignment with proposed interpretations, which includes developing a network of inferences and/or assumptions upon which the interpretations of test scores are based according to potential test performances. This would be the work that is initiated by the test developers and test users. During the second stage, there is “a critical evaluation of the extent to which the proposed interpretations and uses are plausible and appropriate” (Kane, 2012b, p. 4). Ideally, the appraisal stage, which corresponds with the development of the validity argument, would also be

completed first by the test developers and users such that any other stakeholder has the opportunity to read and review the validity argument. All stakeholders need to be critical readers of validity arguments, if this is the language and framework being used to assess and assert the quality of a testing program. Different stakeholders might “attend to different parts of the interpretive argument” though (Kane, 2002, p. 32), and, when this is the case, “it should not be surprising that they arrive at different conclusions about the value of testing programs” (p. 32).

Developing a Validity Argument and Establishing Evaluation Criteria. What makes validity research particularly challenging is that there is a lack of research on the process of developing a validity argument. Slomp (2016a, Validity’s Challenges in Guiding Ethical Practice section, para. 3) argues that even the *Standards* (AERA et al., 2014) “are woefully inadequate” in supporting the practice of developing a validity argument. Although Kane suggests criteria for evaluating an interpretation/use argument, it is unclear how a validity argument can develop and become substantive enough to build confidence in the quality of a testing program. Developing an effective validity argument requires an intensive and critical examination of a testing program. When describing how a test score can be interpreted, it is relevant to discuss: the scoring practices, the evaluation practices and the criteria used, what is counted as evidence, how the evidence relates to the test performances, how test performances are produced through test opportunities, the context(s) in which the test is administered for test takers, the relationship between each of these parts of the program to both the test construct and the broader construct being measured, and the potential consequences of these design choices. An inference needs to be traced in an integrated manner through a testing process from the design to the use of the testing program if it is to be justified and potentially judged to be part of a sound testing practice. This proposed practice aligns with Messick’s conceptualization of validity as an “integrated evaluative judgement” (Messick, 1989, p. 5).

Without a thorough investigation into a testing program, validity arguments are likely to remain lacking in investigative breadth and depth. One example of a flawed validity argument is one that fails to effectively (i.e., persuasively) demonstrate the relationship between a test, a test construct, and the broader construct being measured. A test construct needs to be situated in terms of a broader construct because the test construct is typically only a representation and a sampling or selection of aspects of the broader construct that is being measured. Kane (2002) states that “much of the current practice in the validation of high-stakes testing programs

including high-school graduation tests is seriously flawed, because only a part of the interpretive argument is evaluated” (p. 40). According to Kane (2002), validity arguments tend to focus on how inferences of test scores relate to a test construct, but they fail to extend beyond the testing context to be able to substantiate any inferences made about achievement outside of the testing context. According to Kane (2006), one example of this is the case where “a high-school graduation test might be touted as a predictor of future performance in school and life, but be validated as a measure of a limited domain of content knowledge” (pp. 26-27). Extrapolating from a single performance on one test that measures a limited construct might not be valid if the intended purpose of the evaluation is to use test scores as an indicator of future success in school and/or beyond. There would need to be an argument developed that explains why evaluating the particular test performances can provide evidence that supports the interpretations of the test scores and any subsequent uses of the test scores to make decisions.

The criteria that Kane proposes for evaluating interpretation/use arguments include: clarity of the argument (Kane, 2006); coherence of the argument (Kane, 2006; 2013a); completeness of the argument (Kane, 2013a); reasonableness of the inferences (Kane, 2006); and/or plausibility of the inferences and assumptions (Kane, 2006). These criteria are all subject to the evaluator’s experience reading and reviewing the interpretation/use argument. These criteria also position the evaluator as a reader and as an expert. Kane’s inclusion of a criteria of completeness is particularly challenging for a validator to work with though, since validity research is arguably never complete. Simply identifying a gap or omission in a validity argument also may not be sufficient enough grounds to challenge the validity of using a testing program. The criteria of evaluation proposed by Kane, nevertheless, illustrate how an assessment and a judgement of validity does not need to be a quantifiable measurement.

Argumentation as Performance. The goal of the argument-based approach appears to be to strategically design and develop arguments that can inform and support the use of testing practices. The relationship between the producer or performer and the consumer of the arguments is not emphasized in Kane’s work; however, if claims and justifications are performed sufficiently well such that they are accepted, it would appear validation work is done. It can be argued that, “Validity, then, hinges on one’s ability to construct an argument” (Slomp, 2016b, Validity as Defense section, para. 1). Cronbach (1988) recognized that there was a shift taking place in how validity research was being conducted. He explained, “Validation was once a

priestly mystery, a ritual performed behind the scenes, with the professional elite as witness and judge. Today it is a public spectacle combining the attractions of chess and mud wrestling” (Cronbach, 1988, p. 3). The argument-based approach highlights the significance of making the process of investigation and evaluation accessible. Arguments must be available for readers to read, to review, to make sense of, to interpret, and to respond.

Demanding Exemplars and Cases of Validity Research

Within the field of educational measurement, there is a demand for exemplars and/or cases to help operationalize validity theories into research methodologies. Many researchers have referred to the need for examples of validation research that demonstrate how research methodologies can be effectively implemented in practice (see Kane, 2006; Moss, 2007; Shear & Zumbo, 2014, p. 108; Shepard, 1993; Zumbo & Chan, 2014, pp. 323-324). There is a difference in the demand for exemplars and the call for cases though. Zumbo and Chan (2014) note that following the 1999 publication of the *Standards*, “a group was convened to [. . .] find exemplars and share them widely alongside the *Standards*. This group, all leading experts, however, could not agree on what constituted an exemplar validation that could be modeled by others” (p. 324). The lack of agreement on exemplars is perhaps reflective of how validity research is necessarily a situated practice. One of the issues with seeking exemplars is the diversity of ways in which validity can be interpreted and the wide array of methodologies that can be used to learn about testing programs. Unfortunately, the call for applications of validity theories sometimes appears to be an attempt to search for consistency or the standardization of validity practices. In contrast to the focus on exemplars, a call for cases can be read as a call for demonstrations of how validity research can be contextualized. This study could be conceived of as a case of validity research. Through the critical examination of cases, and through contextualization, it becomes possible to challenge theories in terms of how they can be operationalized. Theory and practice can be part of an iterative process where they each inform one another.

The *Standards* are self-positioned as the leading expert and authority on testing as a form of educational measurement, and of the associated practices of validity research, but the *Standards* are not without their limitations. The *Standards* provide a set of guidelines for conducting validity research. Even the most recently published edition of the *Standards* (AERA et al., 2014) does not address what the process of designing or developing a test construct, as a sample of a broader construct, might entail though, nor what an investigation into consequences (whether

intended or unintended) might constitute. It is likely because of the vagueness of what these guidelines might look like in practice, or how broadly and diversely the guidelines can be interpreted and implemented, that there exist calls for examples of validity research to be able to better understand validity research and what it can possibly look like.

Moving Beyond the *Standards*

This research aligns with many of the criteria and guidelines that appear in the *Standards for Educational and Psychological Testing* (AERA et al., 2014), or the *Standards*, as they have come to be referred to more commonly. However, this research also moves beyond the scope of the *Standards* in what I believe are significant and necessary shifts for validity research. Although the *Standards* is the most canonically-accepted publication regarding the conduct of validity research within the field of educational measurement, there are significant limitations with even the most recently released edition of the *Standards*. For example, the *Standards* (AERA et al., 2014) appear to prioritize “traditional quantitative analyses” (p. 5) whenever they are “feasible” (p. 5). Qualitative methodologies have much to offer both test design and validation beyond the cases where quantitative methodologies and methods are not feasible. This study demonstrates what can be learned as a result of the affordances of qualitative research.

Throughout this chapter, I have shown that designing an argument about the validity of using a testing program must be based on a solid foundation of knowledge about the construct being measured and the potential consequences of measuring a particular domain in a particular context. In the following chapter, I critically deconstruct the validity claims presented by EQAO. I also demonstrate how construct analysis can be performed as an interpretive process, and I present the results of an extensive construct analysis of both the Ontario curriculum and the literacy test. This critical analysis becomes the foundation upon which the findings of the outcomes analysis presented in the remaining chapters can be critically considered.

CHAPTER 4. ANALYSIS OF THE OSSLT'S LITERACY CONSTRUCT

In this chapter, I present an inquiry focused on developing an understanding of the literacy test's construct. The work presented in this chapter is based on the conceptual framework presented in Chapter 3. This chapter includes (1) a critical review of how EQAO discusses the validity of using the OSSLT; (2) an inquiry that focuses on construct analysis as the necessary foundation upon which claims about the validity of using a test need to be based; and (3) a reflection on construct analysis and a positioning of the study presented in the chapters that follow.

The chapter begins by positioning EQAO's validity assertions and by challenging EQAO's approach to asserting and justifying the validity of using the OSSLT. When making claims about the quality and appropriateness of using the literacy test as a measurement tool, EQAO provides insufficient evidence of construct analysis. Following this critique, I position the focus of this chapter on construct analysis, and I explain how construct analysis can be conducted to better understand what the test measures. I explain why I focus on the construct of the test in particular, and I explain why critical literacies is an appropriate area of interest and focus for the construct analysis and also for the outcomes analysis presented in the chapters that follow.

As part of the construct analysis process, I define a theoretical literacy construct, a construct that is reflective of the Ontario curriculum as it relates specifically to the measurement context, and a construct that is reflective of the literacy test. I focus in particular on the relationship between the curriculum's construct and the test's construct as a starting point for understanding how well the test represents what is expected of students in regards to literacy according to the curriculum. Figure 1 illustrates the relationships between the constructs being analyzed. By mapping the test in relation to both the curriculum and a broader theoretical construct, I am able to show not only how the test relates to the construct sample from which it should be derived but also how the test relates to the broader domain being sampled by both the curriculum and the test. Identifying where the curriculum is limited is helpful because that is likely also where the test will be limited in what it is able to measure and report on. A test is limited by the quality of the construct, or construct sample, it samples; however, a limited curriculum construct does not justify the use of a limited measurement tool when test scores are used as a reflection of proficiency of a broader domain of achievement. In the case of the OSSLT, statements about students' ability to successfully demonstrate minimum competency with respect to six particular

skills (three reading skills and three writing skills) are used as a basis to determine the likelihood of students' future success. The six identified skills are considered essential for all students, and they are positioned as the baseline upon which the likelihood of future success rests. It is concerning that broad claims and high-stakes decisions are being made based on what appears to be, and what will be shown to be, a limited assessment.

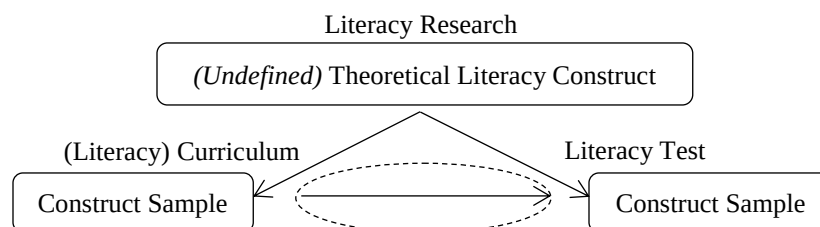


Figure 1. Relationships Between Constructs: Theory, Curriculum, and Test

While it might seem as though conducting research on critical literacies in relation to the high-stakes standardized test being used is not relevant, since the test focuses only on basic reading and writing skills, as will be demonstrated in this chapter, not only are critical literacies relevant to the Ontario curriculum, when a broader theoretical construct is defined, critical literacies can be better understood to be essential to all forms of literacy engagement. In this chapter, I propose a theoretical construction of literacy that positions critical literacies as not only pluralized and multiple but also as an overarching conceptualization of what any and all forms of literacy engagement entail. I propose a literacy construct where the isolation of any particular literacy skill for measurement purposes, as a particular and distinct skill that can stand apart from other literacy skills but somehow remain a representation of literacy proficiency, becomes implausible and, at the very least, undesirable.

To conclude this chapter, I provide reflections on construct analysis, and I position the research presented in the chapters that follow. The discussion of the results of the construct analysis presented in this chapter underscores the significance of conducting an inquiry into the potential outcomes of using the literacy test given the limitations of the test's construct. In the chapters that follow, the study focuses on construct-related outcomes to understand how the design of a test can potentially influence the very educational context that it seeks to measure and report on. The construct analysis presented in this chapter strives to show that it is important to continue critically questioning what is being measured and what is not being measured. It also shows that justifications concerning the validity of using a test need to include considerations of

what is being measured in relation to both the relevant educational context and the broader domain being measured and reported on. Although this chapter simply frames the study presented in the following chapters, this work was the foundation that shaped the outcomes analysis being conducted, and understanding the results presented in this chapter is essential for understanding the relevance of the study in the Ontario context.

Critical Review of EQAO's Approach to Explaining Validity

This chapter begins with a critical review of EQAO's approach to explaining the validity of using the literacy test as an appropriate tool for measuring and reporting on students' literacy achievement. I first position EQAO's validity assertions to clarify what in particular EQAO comments on when they discuss the quality and appropriateness of using the literacy test. I then challenge three of the ways in which validity is discussed that open spaces to comment on the test's construct. In order to understand whether or not the literacy test is able to effectively measure and report on students' literacy achievement, it is important to understand what in particular the test measures and how what the test measures relates to the educational context and a broader theoretical conceptualization of what literacy achievement might entail.

Positioning EQAO's Validity Assertions: Purpose and Use of Test and Test Scores

When analyzing EQAO's validity assertions, it is important to consider what in particular EQAO is asserting is valid. When EQAO makes claims about the validity of the OSSLT (see EQAO, 2015f), they are making claims about the validity of using the OSSLT as a measurement tool that makes it possible to measure and report on Ontario students' literacy achievement. It is important to understand how well EQAO is able to measure what they claim to be measuring, since high-stakes decisions are being made based on students' test scores. EQAO has also designed a testing program to meet particular accountability demands and objectives, and they claim that the test scores they construct can be used for "graduation decision making and improvement planning" (EQAO, 2008a, p. 7). EQAO, thus, has a responsibility to be producing data that can be used in the suggested ways with an accepted degree of validity. If the use of the test as a measurement tool is deemed to be flawed or limited, any subsequent use of test results should also be called into question. EQAO reports on the validity of using the OSSLT to construct achievement data; however, it is unclear who is assessing and reporting on the validity of using OSSLT test scores for either of their intended purposes. EQAO is positioned as an "independent 'arms-length'

agency of the Ontario government that is responsible for designing, conducting, and reporting on curriculum-based large-scale assessments in publicly funded Ontario schools” (OMOE, 2010b, p. 146). EQAO can be considered to be a test developer as well as a test user, but they do not seem to be a test score user. EQAO does not seem to explicitly take responsibility for using the data they construct beyond their need to report to various stakeholders. Figure 2 illustrates the separation that seems to exist between test use and test score use. EQAO could enhance the validity of their testing program by conducting and reporting on research about the extent to which the data being constructed can be used as intended and with what potential consequences or outcomes.

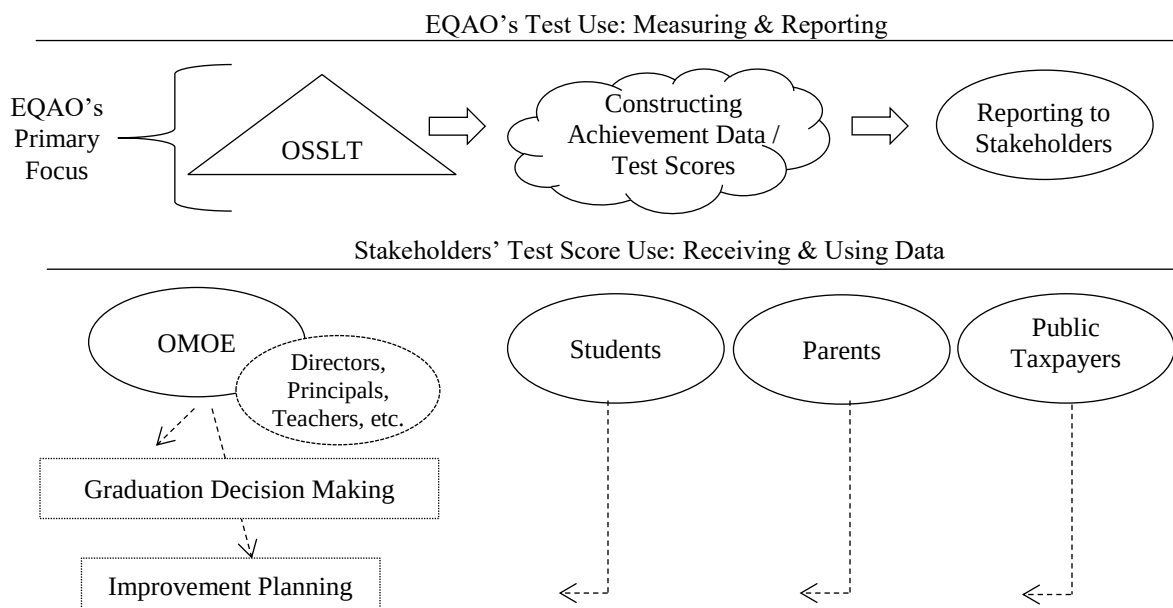


Figure 2. Test Use and Test Score Use

Challenging EQAO's Approach to Asserting the Validity of the OSSLT

Although EQAO asserts the validity of the test results produced through the OSSLT testing program (see EQAO, 2008a, p. 6, 2011e, p. 2, 2013c, p. 15), there is insufficient evidence provided to justify these validity assertions. What is being measured generally as a construct (i.e., literacy as/or reading and writing) needs to be defined. What is being measured specifically based on the educational context, which is defined by the curriculum in this case, needs to be clarified (i.e., what are minimum skills). The test's construct sample needs to be positioned in relation to the curriculum's construct sample, and both of these sample constructs should be justified in relation to a broader construct, which, in this case, is a theoretical literacy construct.

EQAO attempts to justify the validity of the OSSLT by referring to the test's 'blueprint' (EQAO, 2008a, 2015f), by discussing the test's dimensionality, and by addressing measurement error. In the sections that follow, I challenge EQAO's use of these analytical lenses focusing on how the construct of the test is inadequately addressed in each case. There is potential, and even a necessity from a validity argument standpoint, to discuss the construct of the test when considering the effectiveness of the OSSLT as a measurement of students' literacy achievement. When making claims about the validity of the OSSLT, it is necessary to trace each argument back to the test's construct. It is also necessary to situate the test's construct within the broader context of literacy education in Ontario.

Test Specifications and 'Blueprint' of the OSSLT. EQAO justifies the design of the literacy test by highlighting how the test specifications connect with the Ontario curriculum as well as with national and international testing programs. The methods used to illustrate a relationship between the literacy test and the curriculum are limited though. The curriculum connections presented by EQAO (see EQAO, 2008a, 2011f) demonstrate that what is being assessed through the OSSLT can be understood to relate to curriculum expectations; however, there is no argument to justify the inclusion of particular curriculum expectations and the exclusion of others. EQAO states that "not all expectations can be measured in a large-scale assessment" (EQAO, 2015f, p. 3), but this statement only serves to highlight a limitation of the selected testing method without justifying this limitation or justifying the exclusion of particular expectations. The ways in which EQAO presents the connections between the test and the curriculum are discussed in greater detail later in this chapter prior to presenting an alternative method for comparing the curriculum and the test.

EQAO also attempts to assert the quality and appropriateness of the skills they are evaluating in terms of how reading and writing skills are being evaluated through national and international testing programs. EQAO states, "The definitions of reading and writing literacy for the OSSLT are generally consistent with the definitions of these terms for the national and international assessments in which Ontario students participate" (EQAO, 2008a, p. 7). Provincial testing does not need to correspond with the national or international tests that collect data on students' achievement though. Provincial testing needs to correspond with the provincial curriculum. The national and international tests cannot, by design, necessarily relate to or measure in any representative manner the educational experiences of all students across all contexts. Although

EQAO includes statements that compare the OSSLT to external sources (see EQAO, 2015f), this evidence is insufficient as the basis for a validity argument.

When EQAO refers to their ‘blueprint,’ they emphasize how the test measures the same skills every year, as though this consistency is a justification for the continued use of the test each year. EQAO claims that a relationship is maintained between an OSSLT ‘blueprint’ (EQAO, 2008a, p. 32, 2015f, pp. 3, 84), which presents the general design requirements of the test and each version of the OSSLT. EQAO also claims to use “the same *test specifications*” every year (W. T. Rogers, 2013, p. 9). The test specifications outline the six specific skills that will be evaluated. Missing from EQAO’s argument concerning the quality of the OSSLT is a justification for their blueprint and an acceptable justification for the list of test specifications that continue to be used to design the OSSLT every year. Establishing a relationship between the blueprint and any version of the OSSLT might be important for the comparability of the test results across multiple years; however, an argument for the quality of the testing program on the grounds of comparability provides insufficient evidence to support the validity of using the testing program.

Test Dimensionality and Construct Analysis. Another way in which EQAO attempts to justify their test design is through a discussion of test dimensionality (see EQAO, 2015f, p. 85). The focus of test dimensionality is on how what is being measured might be impacted by something else whether that something else is part of the defined construct to be measured or part of a broader construct. It can be challenging to determine what precisely is being measured and how what is being measured, whether intentionally or not, is influencing and is reflected in the construction of test scores. Furr and Bacharach (2014) provide examples to illustrate how one might approach thinking about test dimensionality. They consider a personality inventory that lists six adjectives, including “*talkative, assertive, imaginative, creative, outgoing, and intellectual*” (p. 71) that could be used to describe an individual, and they wonder:

[W]hat exactly does this inventory measure? Does it measure six separate facets of personality, with each facet being reflected by a single adjective? Or does it measure a single construct? If so, then what is that construct – what do these six adjectives have in common as a psychological characteristic or dimension? (Furr & Bacharach, 2014, p. 71)

Furr and Bacharach consider how some of the adjectives could arguably be grouped together into a cluster within the inventory, such as talkative, assertive, and outgoing or imaginative and creative. They separate intellectual though noting “these six test items essentially reflect three ways in which people differ from each other psychologically” (Furr & Bacharach, 2014, p. 72).

Furr and Bacharach (2014) also refer to an example of measuring an individual's weight and how that physical attribute is not influenced by age or hair colour, for instance, which are other physical attributes (p. 73). Considering test dimensionality is significant because "when we measure a physical or psychological attribute of an object or a person, we intend to measure a *single* attribute of that object or person" (p. 73). In the case of the literacy test, two dimensions (i.e., reading and writing) are supposedly being independently measured to reflect a student's literacy skills. Measurements of students' reading and writing skills are reported as a composite measurement of literacy.

Unidimensionality, or focusing on isolated skills, which is a way of narrowing the measurement focus, seems to be valued by EQAO (see EQAO, 2015f, p. 85). Each section of the OSSLT is identified as either a reading section or a writing section, and no test item includes an explicit evaluation of both reading and writing skills. Isolating skills might be done in an attempt to ensure that each particular skill being measured is understood independently and without being impacted by other skills. This is a way of controlling for construct irrelevance variance at the level of each test item. According to Klem, Gustafsson, and Hagtvét (2015), "homogeneity is advantageous for both statistical and practical reasons; it is a way of handling measurement problems, and it simplifies the interpretation of the phenomena being measured (Gustafsson & Åberg-Bengtsson, 2010)" (p. 196). The assumption behind the preference for unidimensionality might be that an individual "can have deficits in one domain and remain relatively strong in another domain" (Tomblin & Zhang, 2006, p. 1194). For example, a student might struggle with reading but excel at writing. Were the student required to read a five-page text and then write an opinion piece that relates to the text that was just read, the student might not be able to write a strong written response because of the integrated reading task. In such a case, a student's test score would likely not be a clear reflection of either what the student is able to achieve with regards to writing or reading. The isolation of literacy skills could potentially have consequences though, including influencing test takers' understandings of what it means to engage with literacies (Wolk, 2009, p. 664). Even though EQAO refers to test dimensionality when presenting validity evidence regarding the test construct, it is unclear how dimensionality relates to literacy as a concept. There is no justification for why unidimensionality is appropriate for a literacy achievement evaluation specifically. Unidimensionality does not appear to be commensurate with any of the forms of engagement being measured (e.g., reading, writing,

and/or literacy). Literacy skills are interrelated and networked skills that work in concert with one another. Even reading and writing are not discrete skills. Being able to read a text requires composition knowledge, and being able to write a text necessitates being able to read and critically review what one is composing. One of the challenges of unidimensionality is that, as a simplification of a construct, it “often appears to contrast with the complex nature of the phenomenon being measured and thereby compromises both the usefulness and the validity of such tools” (Klem et al., 2015, p. 197). If this analytical lens of test dimensionality is used to make claims about the capacity and the quality of the OSSLT, explaining and justifying the isolation of literacy skills becomes central to any discussion of the test design.

Measurement Error and Construct Issues. Another way in which EQAO addresses the validity of using the literacy test as a measurement tool that makes it possible to report on students’ literacy achievement is by addressing measurement error. Measurement error can threaten the validity of test results; however, a certain amount of measurement error, and a potential margin of error, is often accepted. This understanding and acceptance of measurement error is commensurate with a conceptualization of validity where there is an idealized state of perfection even though that ideal is likely unattainable. The decision to be made when making a judgement concerning the validity of test results then is what degree, or how much, measurement error will be acceptable in a particular context. When EQAO makes a claim regarding the validity of test results, a statement is implicitly being made claiming that measurement error is acknowledged and the amount of error has been deemed to be acceptable. A judgement of validity is often recognized as being indicated in degrees (Messick, 1995a, 1995b), rather than as a binary with only two extremes (e.g., valid and invalid), because attainment of a perfected state, although the ideal, is not the only instance in which a practice can be deemed acceptable for use.

How measurement error is conceptualized, and what will be considered as evidence of error, affects a validity judgement. When EQAO discusses measurement error in relation to the literacy test, they report on the precision of measurement with regards to how well test items measure what they were designed to measure with respect to selected curriculum expectations (W. T. Rogers, 2013, p. 37), scorer reliability (EQAO, 2015f, p. 23), and the accuracy and consistency with which levels of achievement of either successful or unsuccessful are determined based on a cut score, which distinguishes between test performances that meet the expected performance standards and those that fail to do so (EQAO, 2015f, pp. 77-78). EQAO’s analysis of

measurement error is limited in that it fails to critically consider the test's construct or the broader educational context that is relevant to the test. EQAO focuses on agreement, consistency, and accuracy of scoring when reporting on the OSSLT. EQAO equates consistency with reliability, and they equate accuracy with validity (EQAO, 2015f, p. 14). EQAO claims that for open-response items, which are evaluated by people, in contrast to the machine-scored multiple choice test items, "inconsistency in scoring is the source of [measurement] error" (EQAO, 2015f, p. 23) that affects "[t]est reliability" (EQAO, 2015f, p. 23). Accuracy is reflected in the alignment of how scorers evaluate test performances in relation to established "true scores" (EQAO, 2015f, p. 78). EQAO claims that the established "true scores" (EQAO, 2015f, p. 78) do not contain measurement error, but the "observed scores" (EQAO, 2015f, p. 78), which are those assigned by scorers, do "include measurement error" (EQAO, 2015f, p. 78). The scoring practices for the OSSLT include having "two trained scorers independently" evaluate each test item using the same evaluation tools. The alignment of assigned scores is then verified. If the difference in scores is minimal, an average of the assigned scores is taken. Otherwise, the response to the test item is re-scored. EQAO also routinely checks the performance of scorers. EQAO states, "This rigour ensures that parents, students and teachers can be confident that all students have received valid scores" (EQAO, 2015f, p. 16). These practices alone do not mean that a test score is necessarily valid though. These practices indicate only that there will be agreement about which score from the set of possible test scores will be assigned to the test performance. The assumption is that the list of possible scores to assign is valid; however, the list of possible scores needs to be justified in relation to the test's construct sample.

When EQAO discusses measurement error, they tend to focus on a specific evaluative tool that is being used and on how that tool might be used (e.g., how the scorers might use the provided rubrics to assess students' performances on the test). Measurement error can occur due to both test design and test use though. In an EQAO report, W. T. Rogers (2013) presents the following understanding of measurement error:

[H]ow many of us have cut a piece of wood either too short or too long or hemmed a dress either too long or too short? What did we do just before we made the cut? We measured, but made an error. There are actually two kinds of measurement error. One type is *random* error, which we would get if we had many people measure the same piece of wood. Not everyone's measurement would be exactly the same. The second type is *constant* or *systematic* error, which we would get if the tape measure began at 5 centimetres and not at 0 centimetres. All who used the tape measure would measure the length about 5 centimetres too long (for

example, 96 centimetres instead of 91 centimetres). Random error affects the *precision* or *reliability* of the observed measurements. Constant error affects the *accuracy* of the measurements, which leads to an invalid or incorrect interpretation of the observed measurements. The possibility of both types of measurement error exists every time we measure student achievement. (p. 7)

Based on this explanation, ‘random error’ focuses on differences in how a tool might be used, while ‘constant’ or ‘systematic error’ focuses on what tool is used and how the tool might be affecting all measurements. In order to be able to determine and claim systematic error as a form of measurement error, a factor that affects all test takers or all evaluators would need to be studied and the outcomes of use known with certainty. Not all uses of a measurement tool can be controlled or thoroughly investigated through methods that result in certain conclusions. While the measuring tape example is intended to be evidence of systematic error, it could arguably be an example of random error, since it is the user that is incorrectly determining what the numbers of the measuring tape signify. Having a measuring tape that begins at five centimeters likely causes measurement error because the design of the measurement tool challenges expectations of what engagement with the tool might typically entail. It is not a given that a measurement error will be produced in all cases though. It just so happens in the case presented that all evaluators are ‘constantly’ making the same error. When using a measuring tape, an individual does not have to begin by using the end of the measuring tape that might begin at zero centimeters. Any section of a measuring tape could presumably be used, as long as the user recognizes what the numerical values and/or the size and spacing of the lines on the measuring tape signify in relation to the particular measuring tape.

The example of hemming a dress also only illustrates one of the possible instances where measurement error might occur during an evaluative process. Table 4 presents an expansion and comparative analysis of a case of hemming a dress and a case of measuring literacy skills to demonstrate how multiple phases of a measurement process need to be considered when attempting to validate a testing program through the lens of measurement error. I have designed a measurement process consisting of five phases, and I have mapped two cases onto the phases to illustrate how considerations of a construct need to come first in order to be able to assess measurement error. Defining a construct is positioned as the foundation upon which a measurement process can be designed. This study focuses on the first phase of the measurement process, since, if the initial designs are flawed, everything else that follows will also likely be

flawed. EQAO seems to focus on the third phase without sufficiently justifying the construct being measured.

Table 4. *Phases of a Measurement Process: A Comparison of Hemming a Dress and Measuring Literacy Skills*

Phases of the Measurement Process	A Case of Hemming A Dress	A Case of Measuring Literacy Skills
Phase 1: Designing the Construct, the Measurement Tool, and the Measurement Process	The process begins with the identification of what a dress is, and then proceeds with gathering the individual's specific dress that is to be hemmed. The tools and process to be used that are relevant to the measurement are determined.	The process begins with the identification of what literacy skills are, and then continues with determining how to potentially gather data with regards to an individual's literacy skills. The tools and process to be used that are relevant to the measurement are determined.
Phase 2: Establishing Measurement Parameters and Contextualizing Measurements	A hemmed length would need to be determined for the dress. The length selected might be a judgement about what might look or function best depending on the context in which the dress will be worn.	Depending on the measurement approach, criteria and standards might need to be established upon which the measurements are going to be based. These criteria and standards would be what make it possible to move from test performances to test results. The measurement parameters (i.e., what is being valued) must relate to the literacy construct being measured. How measurements are intended to relate to a context beyond the specific testing context is also needed.
Phase 3: Performing Measurements	It is possible multiple measurements will be needed based on the style of the dress to ensure the outcome will be an acceptable fit. If a straight line is measured down only one side of the dress, there is no indication of how the remainder of the dress should be cut, folded, and hemmed. As a result of a limited measurement process, the shape of the dress could be lost through the hemming process, if the original shape of the dress is unique at different points. Whether or not the original shape or style of the dress is to be maintained is an expectation or an assumption that would need to be made explicit to ensure measurements are performed appropriately.	Multiple measurements might be needed as a way of not only verifying measurements but also to triangulate (see Burton, 1998; Farquhar, 2012; Jick, 1979; Patton, 2015; Stake, 1995) and/or to "crystallize" (Richardson, 1994, p. 522) the data. Confidence in measurements increases when multiple tools are used to verify and confirm a measurement and when multiple tools are used to provide additional information that adds more breadth and depth to the measurements. It is important to measure a representative sample of the construct multiple times and through multiple modes such that the results will be more likely to be able to effectively convey a judgement that is reflective of the construct.

Phases of the Measurement Process	A Case of Hemming A Dress	A Case of Measuring Literacy Skills
Phase 4: Reviewing and Revising the Measurement Process and Assumptions <i>Note:</i> Based on results of the ‘Review’ in this phase, there is always a possibility of returning to ‘Performing Measurements’ and then repeating the ‘Review’ phase again to ‘Revise’ as needed.	In the case where measurements are submitted to a tailor, it would be important to ensure comparable measurement practices are used when taking the initial measurements and then when repeating the measurements for the hemming. If measurements produced through either process differ, the hemmed dress would not likely match the expectations of the dress wearer.	In order to measure the construct, the assumptions that are informing how the criteria are measured need to be acknowledged and accepted as being appropriate. If assumptions influencing the measurement are not acknowledged and accepted, it is possible the measurement will not accurately represent what the student is capable of achieving, especially if what the student demonstrates is not accepted as evidence of literacy skills. It is important to understand how a particular test demonstration is understood to be reflective of a particular skill. There must be understanding and agreement of the criteria, otherwise the outcomes of the measurement could differ greatly.
Phase 5: Determining and Judging Results	Once the hemming is performed, the outcome of the hemming can be judged to see how well the result of the hemming suits the individual wearing the dress. There is not necessarily a correct response when judging the outcome, but rather a judgement can be made as to whether or not, when the dress is tried on again at another time, possibly on another day, it still works. Perhaps the individual’s size has changed, and the dress might fit a little bit differently when it is tried on. The hemmed dress might still be accepted as being a close enough fit based on the perspectives of the individual wearing the dress, the tailor or individual doing the hemming, and/or friends or family who might be sharing opinions on how the dress suits the individual wearing it.	Once the measurement is performed, the outcomes of the measurement can be judged to see how well the test results are reflective of an individual student’s literacy skills. There is likely no clear-cut measurement that can go undisputed with regards to a judgement of literacy skills. A literacy construct is abstract and complex. There are many ways in which literacy skills could be measured. If the test construct is sufficiently representative of literacy skills as a construct, the test results should correspond to results that could be obtained through alternative methods. If an individual is able to demonstrate achievement that challenges the results of the test, the judgement about an individual’s literacy skills constructed through the literacy test could be challenged. As a student continues to learn and change, and contexts shift, it is also possible the results of the test will be a less appropriate fit as time passes.

As outlined in Table 4, there is potential for constant or systematic error with literacy test results if (a) a literacy construct is not appropriately identified; (b) the specific test construct is not effectively designed; (c) the testing conditions do not make it possible to effectively measure the test construct; (d) the test items are unable to effectively capture the test construct in any representative fashion; (e) the criteria used to judge the test performances do not sufficiently relate to or address aspects of the test construct; (f) the context in which the testing is occurring

and consideration of who is being tested are not factored into the evaluation, and the results are limited or a misrepresentation of the understandings or abilities of the test taker; (g) the assumptions and values informing measurement decisions are not substantiated and justified, and, consequently, evaluation tools are undefined for use; (h) multiple measurements with the same tool(s) are not taken to confirm measurements, or if multiple measurements are taken, but they yield different results; (i) multiple methods of measuring using diverse tools are not used to enrich an understanding of performances being evaluated, and the dependence on a singular tool is judged to be inadequate; and/or (j) the test results and a judgement of an individual's literacy skills are challenged by data collected through alternative practices that are justified and accepted.

When making a claim about the validity of an evaluation tool as complex as the OSSLT, the claim becomes much stronger and more persuasive when evidence is presented that shows that these ten potential sources of measurement error have been investigated and addressed to some extent, and that any threats to the validity of the test results have either been accepted and/or mitigated in some way. One of the most significant issues with EQAO's presentation of their calculations of measurement error is the scope of their investigation.

In this chapter, I focus on points (a) and (b), which concern the broader construct and the test construct. It does not matter how reliably test items can generate standardized and comparable data or how reliably and consistently test performances are scored and results are determined if there are fundamental flaws with what is being measured. The discussions of both test dimensionality and measurement error introduced by EQAO provide opportunities for EQAO to extend and situate their analysis within a broader educational context; however, EQAO's explanations of how they have constructed the OSSLT fail to underline the significance of situating the testing context within a broader educational context. When analysis of the validity of a testing program fails to effectively reflect a broader context, test results lack meaning and significance beyond the testing context.

Focusing on Construct Analysis

This inquiry centralizes analysis around the construct of the literacy test because an inquiry into the validity of using a test needs to be based upon, and be evidence of, a comprehensive understanding of the test's construct. When EQAO justifies the use of the literacy test as a tool that makes it possible to measure and report on students' literacy achievement, the construct of

the test is not sufficiently addressed and justified. The construct analysis presented in this study demonstrates the significance of beginning validity research by critically considering what a test is measuring. In addition to analyzing what the test is measuring though, this inquiry also contextualizes the test's construct in relation to the educational context in which the test is used and in relation to a broader theoretical context that is relevant to the measurement context. Comparative construct analysis between a test construct and a curriculum construct, as well as in relation to a broader theoretical domain, is relevant to judging the validity of a test because an evaluation tool typically does not claim to evaluate the whole of any particular construct. Instead, a test is often used to gather enough data to be able to evaluate a performance that is accepted to be representative of what an individual would be able to demonstrate and achieve should other parts of the construct be evaluated in a similar context. A test construct serves as a sample of a broader construct, and a generalizability inference (Kane, 2013a) is made when commenting on a student's achievement based on test scores. Evaluating the validity of the OSSLT on the basis of the test's construct is challenging work because EQAO does not identify what the broader literacy construct for Ontario education entails, nor does EQAO clearly define or present an even broader research-informed literacy construct that is relevant to the measurement context.

Validity research necessitates clearly defined constructs. Thus, as part of the process of conducting construct analysis, I defined a theoretical literacy construct that is informed by a review of literature in the field of literacy research. The literacy construct I propose is a unified and integrative approach to understanding what literacy engagement entails. I recognize that there are alternative constructions of literacies, as well as alternative literacy perspectives, that could also potentially lead this inquiry. In the sections that follow, I present a critical literacies construct as an overarching theoretical construct that serves as the foundation for this study. This proposed construct provides a lens through which the curriculum can be read and a lens through which the test can be analyzed. I also draw upon this conceptualization of literacies when engaging with the outcomes analysis as the focus of this study. Based on initial readings of the Ontario curriculum and after reviewing and reflecting on the design of the literacy test, I selected critical literacies as a potential area of interest. Critical literacies are valued in the curriculum, but they are not the stated focus of the test. Instead, the focus of the test is on literacy as reading and writing.

Focusing on critical literacies is an appropriate choice for this inquiry because a conceptualization of critical literacy is included in the front matter of all of the curriculum documents that relate to the measurement context, with the exception of the Mathematics curriculum (OMOE, 2005). This suggests that critical literacy skills are relevant for Ontario students and that these skills are valued throughout the curriculum. The Mathematics curriculum is the oldest document being reviewed in this inquiry though, so it is possible the omission is a reflection of the publication date of that document. In the Canadian and World Studies program (OMOE, 2013b), which includes the Grade 9 Geography courses being considered, being “critically literate” (p. 3) is the first priority identified in an introduction of what the revised curriculum sets out to do. According to the OMOE (2013b), “The revised curriculum recognizes that, today and in the future, students need to be critically literate in order to synthesize information, make informed decisions, communicate effectively, and thrive in an ever-changing global community” (p. 3). In addition to articulating the value of critical literacy in the introductions to these programs, critical literacy is also the only type of literacy introduced by the OMOE that is explicitly referred to as a curriculum expectation. These expectations can be found in the English curriculum (see OMOE, 2007). Based on these observations, critical literacy can be regarded as being significant enough in the Ontario educational context to make it an appropriate focus for this inquiry.

Following the definition of a theoretical construct that will be used as the foundation of this instance of validity research, I present the qualitative and interpretivist practices I have designed and used to perform the construct analysis. I conducted both an initial mapping and an expanded mapping to ensure that the construct analysis was extensive, and also to ensure that any claims about construct representation could be sufficiently situated in terms of both the measurement context and the relevant educational context. Each of the mapping processes served a unique function. While the initial mapping served to identify the significance of critical literacies in relation to at least one program in the educational context, and it identified how the construct is underrepresented on the test in relation to what is expected as part of this one program, the expanded mapping situated the focus on critical literacies in relation to the full educational context that is relevant to the measurement context making it possible to understand the significance of critical literacies in relation to the curriculum’s construction of literacy. I then present and discuss the results of these two construct analysis processes.

Remixing and Re-Constructing Literacies: Proposing a Critical Literacies Construct

In the sections that follow, I present a unified literacy construct that positions critical literacies as an overarching conceptualization of literacies. This is the theoretical construct leading the initial construct analysis presented in this chapter. Defining a theoretical construct is an essential part of the process of performing construct analysis. The critical literacies construct I have designed, which is presented in Figure 3, is built around a broad body of literature on critical literacies and related literacy theories. This work is informed by a few models of critical literacy, including: a four resource model developed by Freebody and Luke, which outlines the four roles an individual can occupy, including being a “code breaker,” “text participant,” “text user,” and “text analyst and critic” (Luke, 2000), Janks’ (2000) outline of four interdependent discourses of “domination, diversity, access, and design” (p. 178), Lewison, Flint, and Van Sluys’ (2002) four dimensions, which include “disrupting the commonplace,” “interrogating multiple viewpoints,” “focusing on sociopolitical issues,” and “taking action and promoting social justice” (pp. 382-383), Jones’ (2006) framework that includes deconstruction, reconstruction, and social action, and Stevens and Bean’s (2007) outline of four features including a focus on representations, contexts and environment, metalanguage as a tool, and cycles of deconstruction and reconstruction.

I position critical literacies as an overarching lens for literacy, since I understand critical literacies to relate to any and all forms of engagement. Critical literacy is not just a type of literacy. It is more than just a particular line of inquiry that students can opt to pursue in particular moments while choosing to use other types of literacy in other moments. The *critical* component of what it means to engage with literacies should not be separated from any construction of literacies. The proposed construct presents a way through which all forms of engagement can be interpreted through a critical literacy lens. Every literacy action can be categorized as questioning, analyzing, responding, and/or acting and reflecting. The proposed construct prompts an individual to play an active role when engaging with literacies. Thoughtful and compassionate engagement necessarily requires critical, reflective, and reflexive awareness. Critical literacies are about what it means to inquire, to learn, and to act on that learning. There are many diverse ways of being, engaging, reflecting, and making meaning of the world that together become literacies as a result of conscientious and critical processing. The proposed construct seeks to demonstrate how a literacies construct can be accommodating, compassionate

(c) interrelated processes of questioning, analyzing texts, responding critically, and/or acting and reflecting are intended to emphasize literacy as inquiry-based and inquiry-informed engagement; (d) social justice-oriented perspectives inform the design of the construct; and how (e) literacy skill sets can be un-disciplined and can work across, between, and within multiple contexts.

Positioning the Individual as a Situated Being. The individual and any possible texts the individual might encounter are represented at the center of the construct. Through the design of this construct, I propose a critical look at the role of the individual, in terms of an individual's interests, potential context(s), problem-solving and decision-making potential, and reflective and reflexive potential. This construct demonstrates how a cohesive literacy construct can be represented where literacy is a situated practice (Cope & Kalantzis, 2009; Gee, 2004, 2013; Mellor & Patterson, 2004; New London Group, 1996; Schofield & Rogers, 2004), which is represented by the centralizing of the individual at the core of all literacy engagements. When designing this construct, and deciding where to position the individual within the construct, I drew on Rosenblatt's (1982, 1985, 1986, 1993, 1978/1994, 1995a, 1995b, 2003) transactional theory of reading and Kress and Jewitt's (2003) work with social semiotics. The individual in the proposed construct is a socially-situated being who is also a constructor of meaning. Rosenblatt's work emphasizes the situated and contextualized ways through which readers engage with texts. For Rosenblatt, "meaning does not reside in a text" (Hosenfeld, 1999, p. 113). Instead, "both the reader and the text are essential" components of the "process in making meaning" (Rosenblatt, 1995b, p. 27). Jewett (2007) echoes this understanding by explaining that "the cultural and personal histories of readers serve as filters through which they interpret their reading" (p. 152). Although drawing on different disciplinary perspectives, Kress and Jewitt (2003) similarly explain how "people use the resources that are available to them in the specific socio-cultural environments in which they act to create signs" (p. 10). Jewitt and Kress (2010) highlight, in particular, "the agentive work of the sign-maker in a specific place and time" (p. 342). The individual in the proposed construct is not passively acted upon by the environment; instead, the individual actively constructs and makes sense of contexts in which the individual might be situated.

Positioning the individual as a situated being means understanding what is unique about what an individual brings to an engagement. Individuals' affective interests and needs may differently shape how they engage with literacies. This focus on situating the individual is intended to

emphasize the significance of not only the uniquely composed individual being but also the relationship between the individual and the world, which requires contextualizing all literacy engagements in terms of who is engaging and from within what particular context(s). Contexts can also have an influence on how individuals are able to engage. The process of working with multiple contexts has been presented as a “weaving” (Cope & Kalantzis, 2009) between contexts. This imagery gives the impression that the multiple contexts that an individual might draw from when engaging, whether consciously or not, can work together. Examples of contexts might include home, school, community, or work. Possible contexts could also be distinguished based on disciplinary contexts in which an individual has learned, such as through the arts, sciences, and/or social sciences. Part of critical literacies means questioning and seeking to understand how, for instance, dominant languages, forms, genres, and/or conventions have become accepted or even tradition for particular cultures and contexts. Engaging with literacies is part of the “production of culture” (K. A. Mills, 2009, p. 105). The choices an individual makes perpetuates and/or initiates and inspires what literacy engagement is or could become.

An important aspect of critical literacies is becoming metacognitively aware of who we are as literate beings and how literacy engagements come to be as they are in particular moments. Although Rosenblatt (1982, 1985, 1986, 1978/1994, 1995a, 1995b) highlights the impact experiences have on how readers come to understand and engage with texts, her focus does not appear to be on readers’ awareness that this process is occurring and to what effect. This metacognitive awareness of what it means to engage with literacies is an instrumental part of navigating the world through a critical literacies lens. Critical literacies are about recognizing the consciousness, interests, and awareness that an individual brings to an inquiry or a moment of learning. The proposed critical literacies construct seeks to centralize the individual as an inquirer and a meaning maker that possesses a critical and compassionate consciousness that focuses outward as well as inward. Critically literate individuals are expected to make “connections and disconnections” (Clarke & Whitney, 2009) with texts, which is an attempt to find moments of resonance, consonance, or dissonance when engaging with texts.

In summary, for the proposed critical literacies construct, literacy engagements are not conceptualized as isolated or decontextualized practices; instead, every instance of literacy engagement is understood to be a product of the individual constructor that made something possible within a particular context. Individuals work with the resources and the systems they

have access to in order to develop understanding. It is for this reason that the individual is positioned as being situated as well as being an active (de/re)constructor. Individuals must strive to critically navigate the contexts in which they find themselves, and determine, or ‘design’ (New London Group, 1996), a possible course of action to make sense of the world. Critical literacies are about innovation and problem solving. Concepts of hybridity and intertextuality (New London Group, 1996), as well as remixing, provide effective lenses through which the proposed construct can be interpreted and understood as being reflective of what it means for an individual to work with multiple texts concurrently and to construct meaning. Critical literacies challenge individuals to be critically and reflexively aware of the systems and communities that shape literacies engagements, the meanings that are constructed through these engagements, and the potential consequences or outcomes of these constructions.

Positioning the Individual as an Already Literate Being. The design of the proposed construct positions the individual as an already literate being. The individual in the proposed construct is an active contributor and ‘constructor’ who can draw upon diverse knowledges and experiences when engaging with a text. Part of critical literacies also means engaging in ongoing inquiry and learning though that is both metacognitive and self-reflexive. Individuals are ever-changing beings who continue to expand their communicative, reflective, and contributive capacities. A reflective process is included as part of the proposed construct. This is the self-assessment component of the construct. The individual in the proposed construct is attributed considerable potential as a being that can inquire, learn, continue developing knowledges and skills, and constantly grow as a result of working towards developing a critical consciousness. The individual in the construct could potentially be considered to be a reader, writer, listener, speaker, creator, designer, illustrator, and so on depending on how the individual engages in any given instance. The alignment of the individual with specialized identities is not necessary for the current construct though. All individuals have the potential to be multiliterate beings.

Positioning the individual as an already literate being differs from how literate identities are characterized in Freire’s work (Freire, 1970/2010; Roberts, 1998). For Freire, being illiterate seems to be conceived of as a possible state of being. Critically literate individuals can use their current skills to continue to develop their skills and to learn new skills. Literacy and learning are interrelated. Shoffner, de Oliveira, and Angus (2010) observe that notions of being literate continue to shift as “literacies continue to evolve” (p. 76). Positioning the individual as an

already literate being is not clearly echoed in current research though. The construction of literate identities has been reported in terms of the contrasting in- and out-of-school literacy experiences of learners in adult education (R. Rogers, 2004), in terms of adolescents' experiences with digital and visual modalities (Vasudevan, 2006; Vasudevan, Schultz, & Bateman, 2010), in terms of gender and literacy achievement (Skelton & Francis, 2011), and in terms of the construction of illiterate identities as a consequence of OSSLT testing practices (Kearns, 2008, 2013). In each of these studies, a literate identity seems to be something that is formed and perceived in relation to experiences. The development of a literate identity is a process, something that shifts and changes, and it is not generally a given that an individual is unquestionably literate. For the proposed construct, the individual is positioned as a literate being because all instances of engagement are evidence of literacies though. When conceptualizations of literacies change, the way literate identities are established can also change.

Positioning the Multiliterate Individual in a Multimodal World. The proposed construct is informed by conceptualizations of multiliteracies and multimodality, which both focus on multiplicities. For the proposed construct, literacy engagement is intended to be interpreted alongside an understanding of what it means to 'read the world' as text(s) (Freire, 1985; Freire & Macedo, 1987/2001) and what it means to engage with multiple mediums and through multiple modes. Literacy is pluralized as literacies, and the individual positioned at the center of the construct is a composite of multiple objects that can be engaged with as texts in multiple ways.

Theories of multiliteracies focus on what it means to experience and engage with texts within a context that includes multiple modes of representation (see Cope & Kalantzis, 2009; New London Group, 1996). Multiliteracies expand literacy engagement to include more than just the "functional skills of reading and writing" (Westby, 2010, p. 65). In addition to thinking about literacy in terms of reading and writing, through a multiliteracies lens, it becomes possible to also think about engaging and experiencing the world through speaking, listening, viewing, gesturing, sensing, and/or any other form of interacting. Multiliteracies highlight the processes through which an individual can engage with texts in multiple ways using a diversity of skills to make meaning. The individual positioned in the center of the proposed construct reflects what it means to engage with texts related to navigation, time, construction, technology, arts, nutrition, sports, and so on. The New London Group (1996) explains that multiliteracies are a necessary outcome of "increasing local diversity and global connectedness" (p. 64). Multiliteracies are a

product of a changing cultural landscape where a “plurality of texts [. . .] circulate” (New London Group, 1996, p. 61). Through this lens, engaging with literacies requires problem solving and an individual is both a situated inquirer and a designer.

Multimodality refers to the multiple modes in which, and through which, an individual can convey and represent thoughts. A mode can be conceptualized as “a unit of expression and representation” (Rowse, 2013, p. 3). It is something that can be experienced through an individual’s ‘senses’ (Gibbons, 2012). A mode is something through which communication can be conveyed and expressions can come to be materially constructed or physically demonstrated whether it be letters in ink, sound through an instrument, a quilt made of pieces of fabric, a gesture made with a sword, words spoken, sung, or played through a recording, or a facial expression. Thoughts or inner speech could also be conceptualized as modes in that they too are systems that can be used to categorize or order the world. These modes and the texts produced through these modes can be inscribed with meaning, similar to a layout on a page or a colour perceived through pigments in paint, which can be used to communicate. There does not have to be a physical item or object produced to determine the presence of a mode through which thinking is conveyed or expressed. A lack of movement or lack of expression can also be said to convey meaning. A definition of what constitutes a mode has yet to settle (Gibbons, 2012; Guijarro, 2014). Multimodality considers how more than just language (Jewitt, 2014; Kress & Jewitt, 2003; Unsworth & Chan, 2009) can be a mode and mechanism through which meaning is conveyed. The assumption underpinning multimodality is that “meanings are made, distributed, received, interpreted and remade in interpretation through many representational and communicative modes – not just through language” (Kress & Jewitt, 2003, p. 1).

Instances of multimodality can be identified everywhere. Engaging multimodally “is the experience of living” (Gibbons, 2012, p. 8). Individuals are constantly engaging with diverse texts that require a multiplicity of senses and critical processing of diverse types of information. A book might include words, images, poetic elements, unique textual placement, and/or references to other texts. Each of these aspects and features of a text can expand a reader’s meaning-making experience. It is possible for a participant in a conversation to consider a speaker’s gestures, physical movements, accent, intonation, and/or phrasing when speaking, as well as any physiological reactions. Multimodality is also about simultaneously engaging with multiple modes. It could even be argued that “strictly speaking, there is no such thing as a

monomodal text” (Gibbons, 2012, p. 8). Multimodality is about the ‘interconnections’ (New London Group, 1996) between modes and the hybridized spaces that are created when modes are combined. Multimodality includes “[j]uxtaposing and combining multiple semiotic resources to multiply meanings” (Siegel, 2012, p. 672). Rowsell (2013) refers to concepts of “*transmodal*, *intermodal* and *intramodal*” (p. 4) to explain how “meanings coalesce or cross over” across, between, and/or within modes. Rowsell (2013) explains:

Transmodal elements in texts are elements that reach across modes; for example, there is an interdependence between visual modes and sound modes in films. The phrase, the sum of all parts is greater than the whole, comes to mind when describing transmodal moments [. . .] Intermodal effects, in contrast, represent links between modes that can exist separately but that cross-reference each other [. . .] Intramodal elements involve modes that cohere to make meaning. (pp. 4-5)

This process of working across, between, and with multiple modes simultaneously is echoed in the proposed construct in terms of simultaneously deconstructing and reconstructing texts. It is up to each individual to make meaning by selectively engaging with a diversity of modes.

Deconstructing and Reconstructing Texts as a Meaning-Making Process. Critical literacies are presented in the construct as an inquiry-based methodology for engagement that emphasizes a cyclical progression of deconstructing and reconstructing texts. Concepts of deconstruction and reconstruction have been differently introduced in relation to literacy practices by a number of scholars (e.g., Clarke & Whitney, 2009; Harwood, 2008; Janks, 2000; Jones, 2006, 2012; Leggo, 1998; Stevens & Bean, 2007). The use of the term *deconstructing* is inspired by poststructuralist theories and what it means to read a text in terms of its structure, language, and intertextuality (Lather, 1991; Leggo, 1998). Unpacking the word *deconstruction* from a philosophical standpoint is beyond the scope of this or any single work. Derrida even refuses to pin down the term *deconstruction*, and he is the one who is said to have pioneered the concept (see Biesta, 2009; Gilbert-Walsh, 2007; Vandenberg, 1995). The reason for refusing to define or fix the term might be because language is viewed as an ineffective mode if certainty is the goal. Meaning at once eludes and overwhelms an individual with regards to what language is able to capture and convey. There are always infinite connections between texts that could further complicate any reading of a text. Any articulation of what deconstruction entails would itself be limited to the parameters of what accessible language at the time seems to make possible. Noting the challenge of working with this term is part of what deconstruction is about.

Despite the reluctance to define the term, deconstruction is often conceptualized as an analytical process (Biesta, 2009; Leggo, 1998). A significant part of deconstruction appears to be the recognition that partialities are produced through the multiplicities of the postmodern world. There are affordances as well as limitations to using any particular forms, text features, words, languages, and modes of representation. When deconstructing texts, an individual might inquire into how a text might relate to the contexts in which it is produced and consumed. For instance, an individual might consider how social constructions, including norms, expectations, and conventions, might influence textual engagements. Even these inquiries and the learning that is produced must be recognized as being partial and limited though. Through the literacy lens of the proposed construct, how individuals come to understand and make sense of the world as text(s) is recognized as being a product of particular subjectivities, contexts, cultures, and communities. In addition to recognizing the ongoing layering and weaving of texts that is indicative of intertextuality, critical literacies seek to unpack and make sense of some of these layers from a particular position. The objective is to seek to understand, at least in a particular moment, how literacies shape individuals and also how individuals can shape literacies.

The proposed construct aligns with understandings of the individual as a simultaneous reader and writer (Biesta, 2004) or deconstructor and reconstructor of meaning. Any reading of a text could be understood to be a rewriting and reconstruction of the text anew. What deconstruction potentially offers is the duality of being “critical and also self-critical” (Biesta, 2004) with regards to what it means to engage with texts and make meaning. This is the metacognitive necessity of critical literacies that is always needed such that an individual can, at the very least, remain conscious of partiality, selectivity, and uncertainty with regards to what might seem to be known in any given moment. Rather than always ‘deferring’ (Hendricks, 2011) meaning, critical literacies are about remaining cognizant that meanings are not fixed.

The use of the term *reconstructing* in the proposed construct relates to deconstructing, but this part of the construct is primarily inspired by Freire’s (1970/2010) critical pedagogy.

Reconstructing texts is about reconstructing the world. Metacognitive awareness, or thinking about thinking, and self-reflexivity play pivotal roles in terms of how individuals can consciously and critically engage in textual analysis using particular strategies that enable them to make meaning anew, which becomes the creation or reconstruction of a text. Critical literacies require readers to be self-reflexive when deconstructing and reconstructing texts (Linda Baker & Brown,

1984; Hall & Piazza, 2008; Lalik & Oliver, 2007; McDaniel, 2006; McLaughlin & DeVogd, 2004a, 2004b; McLeod & Vasinda, 2008). The (de/re)construction of a text is understood as a situated practice, and, as such, an individual might wish to consider the multiplicity of contexts that potentially relate to a text to determine how meaning is or can be made. Part of this process necessarily also involves considering how a text could potentially be constructed otherwise. Deconstructing and reconstructing texts is the foundation of an ongoing meaning-making process. Individuals can inquire, learn, reflect, and then act based on their learning. The next section explains what a process of deconstruction and reconstructing texts might entail.

Engaging Through Questioning, Analyzing, Responding, and Acting and Reflecting. A meaning-making process is a cyclical progression that moves through phases of questioning and analyzing texts to responding critically and acting and reflecting based on learning. Each of these actions are listed in Figure 3. An individual is always either processing or engaging in some form, and these experiences can manifest themselves as a form of questioning, analyzing, or responding, which are all related to what it means to be critically acting and reflecting.

Questioning might include: asking questions, inquiring into possibilities for engagement, challenging what you read, view, hear, feel, and so on, wondering about alternatives, consulting multiple sources, seeking more information, and/or attempting to expand understandings and levels of awareness through inquiry. Although questioning is not McGregor's (2000) explicit focus, the study she presents, and her comparative consideration of notions of critically literate and disruptive youth, illustrates what my understanding of questioning could potentially look like in practice. McGregor (2000) looked at the work of a 'Social Justice and Equity Group' at an Australian high school that conducted a survey of all students as a way of "rewriting their own positions within the power relations of the site" (p. 224). The purpose of the survey was to collect data on issues that students felt "needed attention" (p. 224) at the school, where one of the findings was "body image" (p. 224). The reason that questioning and inquiry processes are significant for critical literacies is because critical literacy is "as much about destabilizing knowledge as it is about creating it" (Cunningham, 2009, p. 31). As demonstrated in the work of McGregor (2000), questioning and challenging hierarchies of power is one of the ways in which individuals can become more actively engaged, and potentially also more equitably engaged, in the construction of schooling. Part of inquiry and reflective processing means actively engaging with knowledge (de/re)construction rather than passively accepting represented knowledge as an

absolute or singular truth. Knowledge is constructed, and an important part of this proposed critical literacies construct is questioning how knowledge is constructed and shared and with what potential outcomes. This part of the construct relates to conducting textual analysis.

Analyzing texts might include: acknowledging and engaging with multiple perspectives, overlaying different texts and narratives, exposing gaps and omissions, exploring issues through a disciplinary lens, such as social justice, unraveling debates or stories, categorizing knowledge and experiences, self-assessing, practicing reflexivity, making connections between self and the world, making sense of diverse mediums and modes, interpreting a narrative, and/or playing in the margins and across the pages of texts to make meaning. McLaughlin and DeVoogd (2004b) provide an example of “juxtapositioning” (p. 56) texts such that students can consider the significance of working with multiple perspectives. Clarke and Whitney (2009) also explain how “Taking a picture of something familiar and breaking it down into unrecognizable pieces can also emphasize how important it is to see things from different sides” (p. 533). These authors explain how a picture could be cut into many pieces, and each student in a class could be given one piece and be asked to draw a picture that incorporates the piece they were given. The diversity of images that might be produced through this activity is one way to demonstrate the challenges of working with only a part of the whole when it comes to interpreting and analyzing a text. Analyzing texts as part of what critical literacy entails is highlighted in the work of many scholars, including the work of Jones (2012), Luke (2000), and Molden (2007). Part of the proposed conceptualization of critical literacies is also influenced by notions of ‘play’ (Latta & Hostetler, 2003; Nelsen, 2010; Schofield & Rogers, 2004). Play is a performative and inquiry-based approach to engaging with texts. Through a critical literacies lens, individuals are required to play with texts as part of an analytical process. Eisner (2002a) does not refer to critical literacies explicitly; however, his thinking informs my understanding of how an analytical process could potentially unfold. Eisner (2002a) observes:

We have a tendency in our culture to treat things rapidly. The average museum visitor spends only a few seconds looking at a painting. Most of the time paintings are seen on the run—or at least on the walk. In fact our culture puts a premium on movement and on quickness. Simply think of the image shifts on television, particularly on commercials: every three seconds the focus of the camera is changed. Reflect on the ways in which lunches are eaten at stand-up restaurants serving workers who must get back to their desks as soon as possible. Yes, we put a premium on efficiency and in the process lose the experience that savoring makes possible. (p. 207)

Analyzing texts requires commitment to a meaning-making process, and this is not a process that can be expected to necessarily yield “immediate, tangible results without sufficient time for reflection” (McDaniel, 2006, p. 24).

Responding critically might include: reacting and responding to learning, expressing views and beliefs while making connections with texts, posing questions to challenge a text, sharing information and knowledge, introducing new or alternative narratives, offering a unique or an alternative perspective, reworking a text, sharing textual analysis, engaging in dialogue or conversation, seeking opportunities to learn, engaging with attention to potential consequences, and/or acting to inspire personal and/or social change. I see critical response, whether it be in intellectual form, such as personal or internal contemplations, or outwardly expressed and communicated to others, as more than just a precursor to action though but also an action itself just as questioning and analyzing are also forms of acting. Vasquez (1999, 2004, 2014) provides many examples throughout her research of how kindergarten students respond critically to the texts they engage with. In one example, she explains how students discussed a school barbeque at which there were no vegetarian options, so one of the students in the class who is vegetarian did not have anything to eat. The students attempted to conduct research on being vegetarian through the school library, but there were no available books on the topic. The class initiated a letter writing campaign in response to the injustices they observed and experienced. In this sense, critical response is a form of acting. Critical responses can inspire social action and change.

Acting and reflecting might include and relate to instances of questioning, analyzing, and/or responding. This component of the construct is intended to highlight the agency of the individual. Lewison et al., (2002), Jones (2006), Vasquez (1999, 2004, 2014), and, from a more fatalistic perspective, Morris (2010) each emphasize that action is an important aspect of what it means to engage with critical literacies. Actions can be internalized experiences and/or externalized manifestations of thought processes. Not all forms of acting are easily observable. For instance, questioning does not always have to be expressed externally for it to constitute an instance of critical action. Questioning might be part of an internal processing of information. It takes a critically conscious individual to pause and question what they are learning. Acting might include reflecting, inquiring, and/or sharing knowledges and experiences with others in a myriad of possible ways. Everything an individual does is an action, and it might also be an instance of questioning, analyzing, and/or responding. Reflecting is highlighted in this section of the

construct to emphasize the significance of ongoing learning as part of what it means to engage with critical literacies. When critical literacies is the overarching lens, metacognitive awareness is paramount to any understanding of what literacy engagements entail.

This component of the proposed construct is also included specifically to highlight the significance of transformative social action that extends beyond an individual's processing and personal learning, which are emphasized through questioning and analyzing. In other words, acting is intended to expand 'responding critically' to necessarily include considerations of what it means to move beyond the context of engaging with a particular text to share one's learning or to enact change in the context of a broader community. Transformative social action and the desire to enact positive social change is an important part of what it means to engage through a critical literacies lens. The inclusion of both responding critically and engaging in transformative action, as a result of inquiry and reflection, is informed by Freire's (1970/2010) theories of critical pedagogy (A. S. Beck, 2005; Larson & Marsh, 2005; McDaniel, 2004). The move to action where social change extends beyond just the individual appears to be the objective for Freire. A critically literate individual seeks to learn with the goal of being able to contribute to society in meaningful ways. Luke (2000) also writes that critical literacy includes "a commitment to the use of textual practices for social analysis and transformation" (p. 454).

When conceptualized as a process of deconstruction and reconstruction, critical literacies afford each individual the potential to participate actively in society, to inquire and learn about themselves and the world in which they are situated, and to simultaneously contribute to constructing the design of that world. Critical literacies make it possible for people to "enter into 'rewriting' the world into a formation in which their interests, identities, and legitimate aspirations are more fully present and are present more equally" (Lankshear & McLaren, 1993, p. xviii). While questioning and analyzing might more closely relate to deconstructing texts, responding as well as acting and reflecting could be understood as being more closely aligned with reconstructing texts. While reflecting can include analysis, it can also be conceived of as the construction of a new understanding and a text. Questioning and analyzing facilitate and contribute to this form of reconstruction as part of a cyclical process. This is the cyclical progression of learning and acting on that learning in potentially powerful ways.

Social Justice-Oriented Perspectives Informing the Construct. The proposed literacies construct makes it possible to think and engage through a process that is inquiry-based and that is

oriented and informed specifically by social justice-oriented perspectives. The connection between critical literacies and social justice is presented in the Ontario curriculum in various programs, including: English (OMOE, 2007, pp. 34, 110), Science (OMOE, 2008, p. 38), Geography (OMOE, 2013b, p. 51), History (OMOE, 2013a, p. 51), the Arts (OMOE, 2009, p. 53), French as a Second Language (OMOE, 2014b, p. 49), and Health and Physical Education (OMOE, 2015b, p. 72). The connection between critical literacies and social justice is also highlighted by many researchers (e.g., Comber, 2015; Freire, 1970/2010; Janks, 2000; Jones, 2006, 2012; Morrell, 2008; North, 2008, 2009; Powell, Cantrell, & Adams, 2001; Vasquez, 1999, 2004, 2014). The proposed construct is a theory of engagement that has been developed based on what social justice-oriented research tends to value most, including acknowledging multiplicities in terms of points of view, perspectives, and approaches to thinking and learning and also acknowledging constructions of access, power, normalization, community, leadership, and ethics. According to Vasquez, Tate, and Harste (2013), “critically literate individuals demonstrate some specific dispositions relative to their worldview” (p. 8). For the proposed construct, this disposition could be characterized generally as the cyclical process of deconstructing and reconstructing texts or more precisely as moving through questioning, analyzing, responding, and acting and reflecting.

Un-Disciplined Literacies. Literacy skills are not uniquely contextualized in specific disciplines in the proposed construct. There are no disciplinary boundaries structuring the organization of particular forms of engagement. Learning is always situated and contextualized in some manner though, and individuals make sense by situating something abstract within a particular and concrete context. Rather than situating particular skills in particular disciplines, I understand the active individual to be someone who can potentially work across disciplines and who can introduce a uniquely personalized combination of knowledges and experiences when engaging with texts. Thus, rather than situate the literacy skills or processes, I am situating the individual who engages in a diversity of ways. The proposed construct suggests that individuals strive to develop an awareness of how their literacy skills can transcend disciplinary boundaries and how knowledges and skills can potentially be transferred across diverse contexts. Transferring learning between contexts is part of the ongoing process of decontextualizing and recontextualizing knowledges and experiences. This is part of a metacognitive meaning-making

process where the focus is on making sense of how an individual can engage using a diversity of knowledges and skills to contribute in meaningful ways.

A Developing Construct. The critical literacies construct is unfixed and ever-changing. As learning continues and as disciplinary perspectives expand, this construct will continue to shift. Even a concept of literacy is a discipline-specific way of understanding how individuals engage in relation to one another and the world. Through the proposed literacy lens, everything and everyone is a text to be (de/re)constructed. If the world can be conceptualized as texts, I understand literacies to be about how individuals engage with those texts.

Performing Construct Analysis Using Interpretive Methods

The theoretical construct I have presented serves as the foundation for the construct analysis being conducted throughout this chapter. In this section, I present the qualitative and interpretive methods I have designed and used to analyze both the curriculum and the literacy test construct samples. While the methods presented are sufficient for investigating an already designed test, the proposed construct analysis processes would need to be expanded should this approach be used for designing a test construct.

The construct analysis presented in this chapter, as well as the outcomes analysis presented in the chapters that follow, demonstrate how interpretive methods can be designed and implemented in the context of validity research. DeLuca (2011) writes, with reference to the work of Kane (2006) and Stobart (2009), that although interpretation is emphasized as an important part of validity research, “there have been few explicit articulations of practical methods used to engage interpretive validation practices” (p. 304). The work presented in this dissertation serves as one example of how qualitative validity research can be designed and conducted using interpretive methods. DeLuca (2011) suggests that an interpretive methodology might include: reflexivity, a recursive construction of meaning, a consideration of multiple perspectives and sources, an ongoing review and evaluation of evidence, an acknowledgement of subjectivity, a challenging of linearity with the introduction of refraction, as well as a critical consideration of representations (pp. 311-315). These aspects of a possible interpretive methodology parallel many aspects of the construct analysis and outcomes analysis processes I have designed for this study.

One of the ways in which I have approached construct analysis is by using mapping methods, which make it possible to work through and make sense of the complex narrative texts relevant

to this inquiry. What is perhaps most significant about the construct analysis presented in this chapter is that it is systematic and that is extensive. Many different documents and narratives have been critically woven together to form the basis of constructs that reflect the curriculum and the test. The layering and mapping of multiple narratives acknowledges and respects the nuances of language that are used to characterize what literacy is expected to entail for students in Ontario. Rather than consolidating constructs or reducing the data, which would likely narrow the scope of the constructs pre-emptively, mapping methods are used that enable working with many layers of texts.

Mutable Mud Mappings. The research methods used for the construct analysis presented in this chapter align with mapping methods presented in a number of current research studies. W. Morgan (1997), for instance, reflects on what it means to create a map of critical literacy and a “geography of English” as something more than a historical overview (p. 1). W. Morgan’s (1997) mention of a “mud map” (p. 1), though not a concept she elaborates upon, provoked my thinking around how mappings could be constructed. Upon reading this expression, I envisioned a large open and smooth space of mud, blanketed by water far off in the distance. Individuals could potentially move across this surface sinking into the mud just enough to leave imprints that could intersect one another’s tracks. The imprints could merge, blend, and, even at times, disappear amongst others. A mud map, as I envisioned, would be mutable and flexible. It could easily be fully or partially washed away by water or by an overwhelming crossing of tracks, as it is malleable, unstable, and always shifting. Rather than fixing literacy constructs with any asserted permanence, my goal in the sections that follow is to begin defining literacy constructs through interpretive processes without necessarily developing a fixed construct. There is no clearly defined singular literacy construct consistently and cohesively represented in either the OMOE or the EQAO resources being reviewed. Thus, this inquiry is an attempt at mapping the necessary foundation for performing construct analysis, which is an essential aspect of conducting validity research.

Complex Concept Mappings. Concept mapping is also about working through the development of an idea using a variety of text-based strategies combined with spatial organization (see Butler-Kisber & Poldma, 2010). Butler-Kisber and Poldma (2010) highlight how concept mapping “allows the researcher to move from written analytic text to the visual and back again” (p. 10). Concept mapping can be understood as a form of thinking through writing.

It is a form of textual representation where emergent ideas can take shape throughout the composition process. When analyzing the test construct for the OSSLT, I used a variety of inquiry and representational strategies to make sense of the diverse texts I was working with. For example, I designed tables to organize data in an itemized manner. I also created graphics to spatially represent relationships and connections between ideas. Throughout all of these practices, I attempted to remain mindful of the meaning I was constructing as a result of the ways in which I was organizing and representing the data I was working with. I recognize that through this analytical work I was constructing data and determining and developing constructs rather than simply identifying and replicating existing constructs. I present the methods used and the decision-making processes I engaged in to make it possible to understand how the constructs being defined came to be.

Overview of Two Construct Analysis Processes. The construct analysis presented in this chapter is the product of an initial mapping process and an expanded mapping process. Both of the mappings served to situate the literacy test within the broader educational context which it is intended to reflect. As previously noted, a theoretical construct is a necessary foundation upon which all construct analysis is based. The initial mapping was led by the proposed critical literacies construct that helped shape and inform the focus of this study as an inquiry into (1) how the OSSLT relates to literacy education in Ontario and (2) the extent to which test scores can be said to be representative of the literacy skills students are expected to be learning. An expanded mapping process was used to contextualize the findings of the initial mapping and to strengthen an argument concerning construct representation.

Initial construct analysis mapping process. For the initial mapping (see Figure 4), I mapped an excerpt of the curriculum and one fully released version of the OSSLT's test items onto the defined critical literacies construct. The Grade 9 English curriculum was used for this initial mapping. Grade 9 is the highest level of achievement being evaluated through the OSSLT, and a Grade 9 English course is compulsory for all students in Ontario. Thus, these courses fall within the parameters of the curriculum that relates to the measurement context. The English program is also an appropriate choice for initiating this construct analysis, since this program is positioned by the OMOE as the "dedicated" space for literacy education (OMOE, 2007, p. 3). As previously noted, the English curriculum (OMOE, 2007) also includes explicit critical literacy expectations. It was a productive preliminary observation to be able to draw the conclusion based on the

explicitly labelled curriculum expectations that critical literacy skills are clearly expected of all students in Ontario. Recognizing that critical literacy skills are explicitly valued and expected in at least the English program suggests there is construct alignment between the curriculum and the theoretical construct at least to some degree.

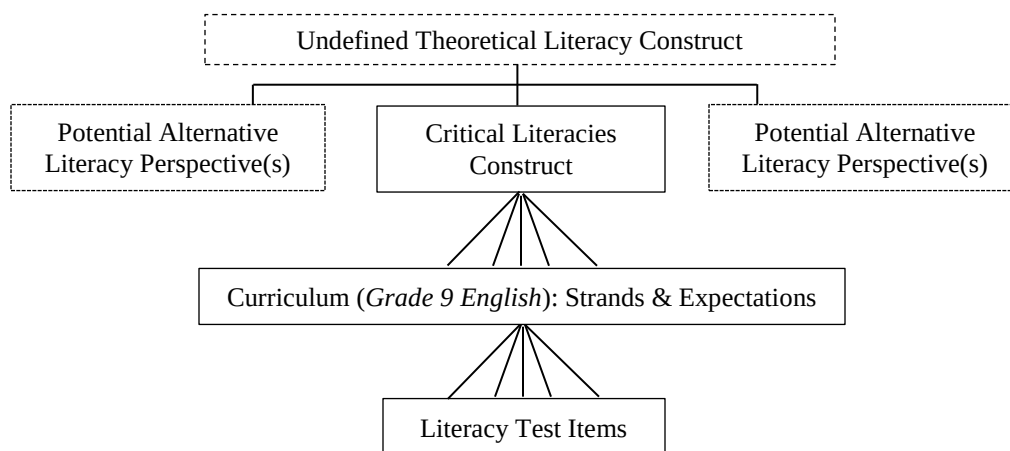


Figure 4. Overview of the Initial Construct Analysis Mapping Process

After mapping the curriculum onto the construct, I then mapped the test items onto the curriculum. Although one example of a fully released version of the OSSLT was used for this mapping (EQAO, 2010d), the types of OSSLT test items remain consistent from year to year. Considering how test items map onto the curriculum when the curriculum is already mapped onto the proposed construct is one way of judging the extent of the test's construct coverage. By mapping the test items, what was being mapped were occasions where students are potentially afforded an opportunity to engage with and/or use their critical literacy skills when taking the literacy test. Note that this is a generous approach to mapping the potential of the literacy test. If a comparative analysis of the literacy test and even just one compulsory course can reveal evidence of construct underrepresentation for the OSSLT, especially through a generous mapping of possibilities, there can be cause for concern with regards to how EQAO is evaluating and reporting on students' literacy skills.

Expanded construct analysis mapping process. Although the initial mapping positions critical literacies as an important part of Ontario literacy education based on the Grade 9 English curriculum (OMOE, 2007), an expanded mapping was required to position critical literacies in the context of Ontario education more broadly. Figure 5 illustrates the expanded mapping

process I designed for this inquiry. Table 5 presents a detailed explanation of this process divided into three parts and ten phases.

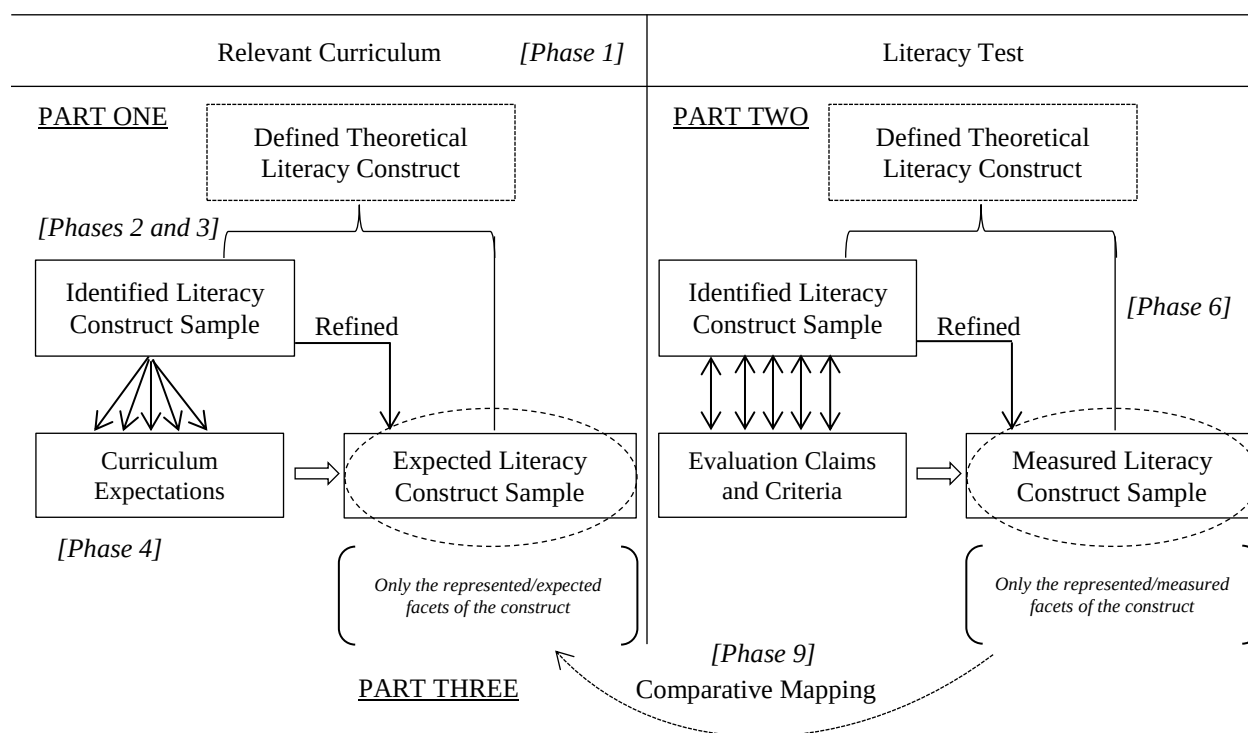


Figure 5. Overview of the Expanded Construct Analysis Mapping Process

Note. The following four phases are not identified in this figure: *Phase 5* is a reflection on the curriculum mapping; *Phase 7* is a reflection on the test mapping; *Phase 8* is a critical review of EQAO's mapping of the curriculum and the test; *Phase 10* is a discussion of the mapping results. (See Table 5 for a detailed overview of this process.) The Ontario curriculum does not position literacy education as a sample of a broader literacy construct. There are, nevertheless, inclusions and exclusions with regards to the educational goals and objectives reflected in any curriculum. The Ontario curriculum is a sample, and just one example, of what literacy education could entail.

In both Figure 5 and Table 5, I outline the three parts of the expanded mapping process, and I present the specific phases through which I analyzed literacy constructs in the Ontario context. Aspects of the mapping process are reflective of the unique characteristics of the OSSLT and the unique complexity of what it means to work with the Ontario curriculum. A construct analysis process must be customized to the particular testing program being assessed. Although the tasks and the steps presented are specific to the present inquiry, the phases organizing the construct analysis process could potentially be used to inform construct analysis work in other contexts.

Table 5. *Overview of Expanded Construct Analysis Mapping Process and Methods*

Phase	Task	Steps
Part One: Literacy and the Curriculum		
Phase 1: Curriculum Identification	Identify the parameters of the inquiry relevant to the measurement context (i.e., Determine a common curriculum for all students who write the OSSLT).	• Identify graduation requirements. • Identify the courses that all students are expected to complete by the end of Grade 9. • Identify Grade 8 courses that do not have a required counterpart in Grade 9, which can be used to bridge the elementary and secondary curriculum continuum. • Identify the courses that are streamed, and review the curriculum documents that include these courses to highlight unique nuances and any significant differences in the curriculum expectations across the levels of streaming.
Phase 2: Construct Development	Identify the construct sample for the curriculum (i.e., Determine a common literacy curriculum for all students who write the OSSLT).	• Chart all references to the terms <i>literacy</i> and <i>literacies</i> found across the curriculum expectations for the identified courses. • Expand the search to the introductions to the include all peripheral matter in the curriculum documents that frames the programs (e.g., program introductions and the glossaries), and chart the findings, including listing all references to the terms literacy or literacies (i.e., general mentions of literacy, as well as all the specialized types of literacies mentioned), the curriculum source, and all associated ideas suggesting how the term literacy is understood in a particular disciplinary context. • Analyze the findings, including re-reading all literacy-related and literacy-associated concepts, to understand how literacy as a concept is being developed across the curriculum documents. • Synthesize repetitive references into a single item, convert into an action, and support with reference to the source(s). • Compose a literacy construct: Organize findings into lists of specific types of literacy followed by all literacy-associated actions and any related concepts illustrating what literacy might look like or what literacy might relate to conceptually based on how these terms are introduced within the curriculum.
Phase 3: Construct Expansion/ Enrichment	Consult supplementary documents referenced in the curriculum to expand and enrich a reading of the curriculum.	• Review a selection of OMOE resources that are referenced alongside a presentation of the concept <i>literacy</i>.

Phase	Task	Steps
Phase 4: Construct Refinement	Develop an expected literacies construct (i.e., Refine the scope of the construct sample to include only the aspects of the construct for which there is evidence of a related curriculum expectation indicating what students are expected to be able to demonstrate).	• Revisit the learning expectations of the particular courses identified as relevant to this inquiry. • Search the curriculum expectations using the language used in the peripheral matter of the curriculum (i.e., more than <i>literacy</i> and <i>literacies</i> explicitly). • Identify relationships between the framework of the curriculum and what is explicitly expected of students, and highlight one example (i.e., one instance of a curriculum expectation from any of the courses identified as being relevant to this inquiry) to justify inclusion of a concept within the expected literacies construct. • Verify the differences between the streamed versions of courses to identify only expectations common to both courses or to identify a pair of expectations that indicate that, although the context is different, all students will be expected to be able to demonstrate a particular literacy-associated action. • Exclude all items from the developing composite literacy construct that do not appear to be explicitly expected of students in the identified courses from the newly constructed expected literacies construct.
Phase 5: Reflections on Results	Reflect on mapping the literacies of the curriculum.	• Reflect on mapping the literacies of the curriculum (i.e., the common literacy construct and the expected literacies construct, and how these constructs can be read in light of a broader theoretical construct).
Part Two: Literacy and the Test		
Phase 6: Test Construct Identification	Define the construct sample for the test (i.e., Determine a literacy construct for the OSSLT).	• Review different types of EQAO resources (i.e., information documents, technical reports, released OSSLT documents). • Identify how literacy is defined in the context of the test. • Expand the definition of literacy to include an itemization of the literacy skills EQAO claims are evaluated through the OSSLT. • Synthesize repetitive language across EQAO resources while maintaining unique nuances of how literacy skills are being presented. • Present literacy ‘actions’ to parallel the curriculum construct work. • Present the construct in two parts based on the two dominant skill sets identified consistently by EQAO. • Organize all related items and alternative representations of those items together under categories/overarching headings. • Identify the type of resource from which the literacy-associated action was drawn and reference particular sources along with an explicit identification of the explicit reading and writing skills that EQAO has identified are being evaluated.
Phase 7: Reflections on Results	Reflect on mapping literacies and the OSSLT.	• Reflect on mapping the literacies of the OSSLT.

Phase	Task	Steps
Part Three: Mapping the Curriculum and the Test		
Phase 8: Review of Test Construct Justification	Review EQAO's mapping of the OSSLT and the curriculum.	Review EQAO's Framework (2008a) and Curriculum Connections (2011f) documents that make an argument concerning how the OSSLT relates to the curriculum.
Phase 9: Mapping of Curriculum and Test Constructs	Map the expected literacies construct (derived from the curriculum) and the OSSLT's literacy construct (i.e., Map the two construct samples). Map the construct samples in relation to the proposed theoretical construct.	- Identify the category from the OSSLT construct that relates to each item in the expected literacies construct where there is an observed relationship. - Identify at least one example of a skill listed in the category to support the relationship between the curriculum and the OSSLT. - Identify items for which there does not appear to be a strong match, but an argument could potentially be made that there is a possible connection between the expected literacies construct and the OSSLT's literacy construct (identified by a 'therefore' symbol (:)), and a light greying out of the item). - Identify items for which there does not appear to be any match (identified by a darker greying out of each item). - Map both the test and the curriculum in relation to the proposed theoretical construct (i.e., where critical literacies are the overarching perspective through which engagement with literacies is filtered) to identify areas of construct (under)representation.
Phase 10: Discussion of Results	Discuss the mapping results.	Discuss the mapping results.

Rather than imposing the proposed literacies construct onto the curriculum and the test, the primary focus of the expanded mapping was on identifying and defining the theoretical literacy constructs that are reflected throughout the curriculum and the test. The expanded mapping broadens the scope of this inquiry and it makes it possible to analyze construct representation in a more complexly contextualized manner. In addition to mapping more than just critical literacies specifically, the expanded mapping also moves beyond the parameters of the English program to understand how literacy is conceptualized in the other subject areas that students are studying. Both the OMOE and EQAO emphasize that literacy is to be assessed “across all subjects” (EQAO, 2008a, p. 18, 2015n, 2016a, p. 6, 2016e, p. 21; W. T. Rogers, 2013, p. 11) and “throughout the curriculum” (OMOE, 2011b, p. 56). The expanded mapping concludes with a comparative mapping of the curriculum construct and the test construct to help situate the literacy test's construct as a sample of the curriculum. Table 6 summarizes a few significant differences between the initial and expanded mappings.

Table 6. *Differences Between the Initial Mapping and the Expanded Mapping*

	Initial Mapping	Expanded Mapping
Construct Definition	Pre-established – Inquiry lead and directed by what a proposed theoretical critical literacies construct makes possible	Emergent – Inquiry of how the curriculum and the test align themselves with a theoretical literacy construct
Parameters of Inquiry	Excerpt Only – Inquiry focuses on Grade 9 English courses related to the measurement context	Full Context Required – Inquiry includes all relevant curriculum as related to the measurement context
Assessment Capacities	Opportunities – Mapping the test items and what they make it potentially possible to measure	Claims – Mapping evaluation claims and criteria and what is actually measured
(Under)representation	Limited Analysis – Potential to make a claim about representation in relation to only the English courses being mapped	Comprehensive Analysis – Potential to make a claim about representation in relation to literacy education as it relates to the full measurement context

How literacy is defined and developed as a construct is the focus of this inquiry, since both the literacy graduation requirement and the Ontario Secondary School Literacy Test (OSSLT) emphasize literacy explicitly in their names. The OMOE has narrowly defined literacy as reading and writing skills for the literacy graduation requirement (see OMOE, 2011b, p. 56), and EQAO echoes this definition of literacy (see EQAO, 2015f, p. 82). The OMOE does not specify which reading and writing skills are required for the literacy graduation requirement, but EQAO evaluates a particular set of three reading skills and three writing skills. Construct underrepresentation (see Messick, 1989, p. 7) can threaten the validity of using a testing program, and when the validity of test use is threatened, so too is the validity of test score use.

Findings of the Initial Construct Analysis Mapping Process

The initial mapping was organized based on the cyclical deconstruction and reconstruction of texts and the four components of the proposed critical literacies construct (i.e., questioning, analyzing texts, responding critically, and acting and reflecting). The strands of the Grade 9 English courses were mapped onto the construct and relevant curriculum expectations were listed. A set of OSSLT test items was then mapped onto the curriculum expectations. Figure 6 presents a representation of the findings of the initial mapping. A more detailed reporting of the findings of the initial construct mapping process is presented in Appendix A. The titles of the curriculum expectations referenced in Figure 6 are listed in Table A1. The coding labels used to identify the test items in Figure 6 are listed in Table A2. Two ways in which this representation of the findings of this initial mapping process can be read are also presented and discussed in this appendix.

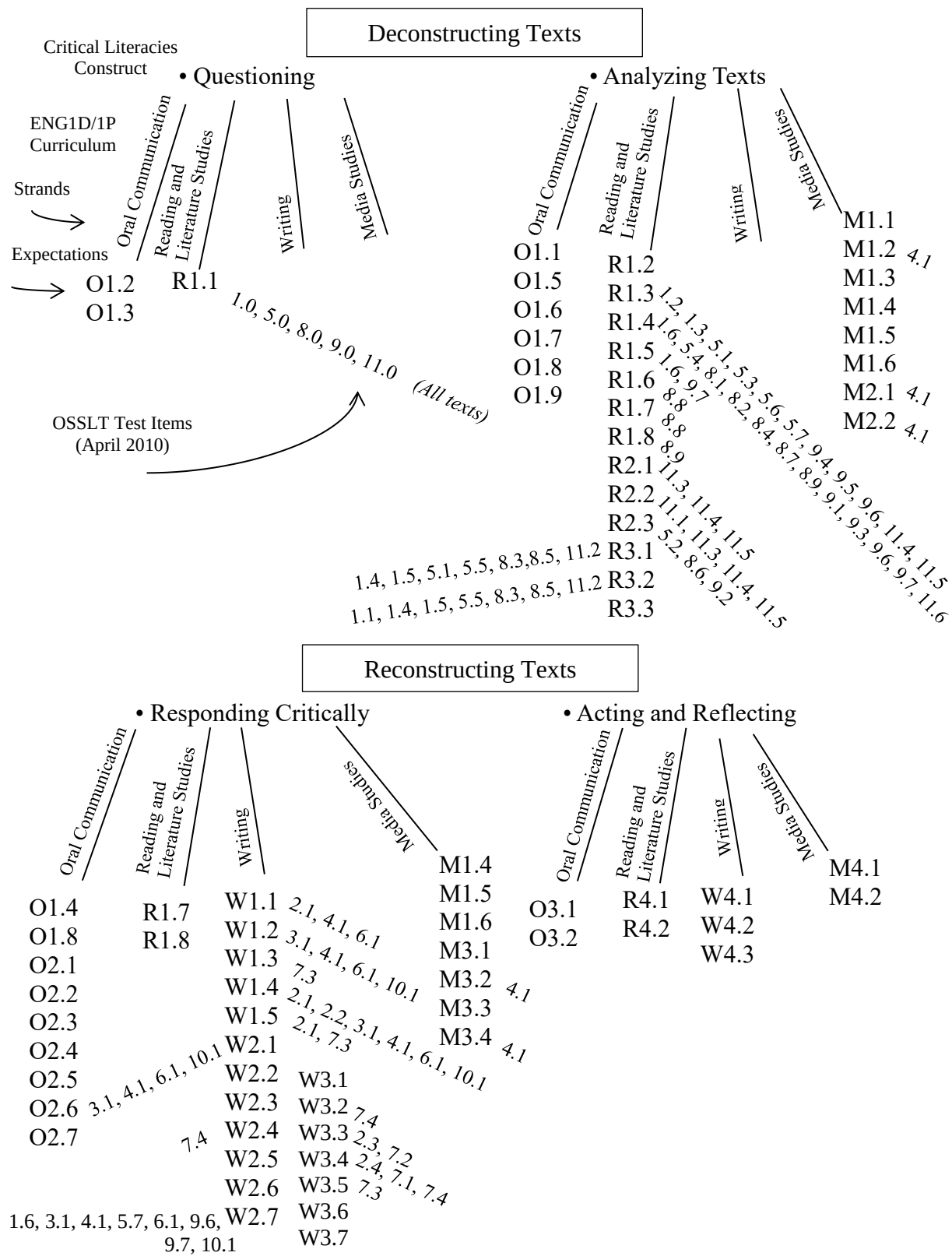


Figure 6. Initial Construct Mapping: A Representation of the Findings

Discussion of the Findings of the Initial Construct Analysis Mapping Process

As a reflection on the results of the initial mapping process, in the sections that follow, I discuss (a) construct coverage, (b) capturing processes, and (c) construct underrepresentation.

Construct Coverage. The proposed critical literacies construct is a unified and overarching conceptualization of literacies that relates to any and all instances of literacy engagement. Thus, all curriculum expectations map onto the proposed critical literacies construct in some way, and so too do all of the test items. The quantity of items under each component of the construct does not reflect the significance of particular components of the construct. Some components of the construct are perhaps more easily captured clearly in one expectation, whereas others have been elaborated across many curriculum expectations. The volume of test items that relate to particular curriculum expectations also does not replace the need for a few quality items that might better represent the expectations. The quality of the construct coverage is not what is reflected in this mapping. Many of the test items do not prompt engagement that parallels the sophistication or complexity of the curriculum and what is expected of students.

Capturing Processes. The initial mapping was based on any opportunities through which students could potentially engage and demonstrate critical literacy skills. Without understanding how each particular student might engage with any given test item, it is difficult to complete the initial mapping. When students engage with a test item, I would argue they move through all phases of the literacy engagement process to some extent. For instance, a student might be processing internal *questioning* and wondering how to proceed, a student might be *analyzing* test items to determine possible responses, and a student is expected to be *responding*, and each of these forms of engagement is a form of *acting* that also involves some form of *reflecting*. This process is not reflected in the mapping. There might not always be evidence of the processes through which a test taker engages. The literacy test focuses on the products that are produced rather than seeking to understand or evaluate how students are engaging with literacies. When judging the validity of using a test as a measurement tool, it is not what the test makes possible that matters, but rather it is what explicitly is being measured that matters. This mapping makes it possible to imagine how there is a wealth of data potentially being collected through the literacy test that are being overlooked and not counted in the evaluation.

Construct Underrepresentation. Even with a generous mapping of the potential of the literacy test to facilitate engagement with critical literacies, there are aspects of the critical

literacies construct that are reflected in the curriculum expectations that are underrepresented in the test. As illustrated in the initial mapping, there are no test items that prompt students to engage using oral communication skills or reflective and metacognitive skills. Very few test items relate to ‘Media Studies’ in the curriculum. No test items have been associated with ‘Acting and Reflecting’ in the literacy construct. There are few expectations in the curriculum that relate to questioning, and, consequently, very few test items are aligned with this part of the construct. This means that half of the construct (‘Questioning’ and ‘Acting and Reflecting’) is underrepresented on the test. Textual analysis on the literacy test is also limited primarily to explicit and implicit explanations and ‘critical responses’ are limited primarily to vocabulary, organization, supporting details, and the structure or form of written responses. This initial mapping is helpful as a precursor for a more expansive construct analysis. It provides the foundation for an investigation into the test’s underrepresentation of critical literacies.

Findings of the Expanded Construct Analysis Mapping Process

The expanded construct analysis mapping was divided into three parts. As outlined in Table 5, Part One (*Phases 1 to 5*) focused on literacy and the curriculum, Part Two (*Phases 6 and 7*) focused on literacy and the test, and Part Three (*Phases 8 to 10*) focused on a comparative mapping of the curriculum and test constructs that were developed in the first two parts of this expanded mapping process. In the sections that follow, for each part of the expanded construct analysis mapping process, I present a brief overview of what the phases of the mapping entailed, followed by a presentation of the results and then a discussion of the results.

Part One: Literacy and the Curriculum

A statement regarding the validity of using the literacy test needs to include a statement regarding how well the test represents the educational domain that it is intended to measure. Thus, the first part of this construct analysis process focused on how literacy is presented in the curriculum. Neither EQAO nor the OMOE present a clear literacy construct that reflects the literacy achievement that is expected of all students by the end of Grade 9, so this analytical process was also a construction process. I designed a literacy construct that is reflective of the curriculum by first identifying a common curriculum for all Ontario high school students (*Phase 1*). As part of this process, I identified the graduation requirements that are expected of all students, and I identified the specific requirements that are expected to be completed by the end

of Grade 9 in particular. These are two of the parameters of the measurement context. The literacy graduation requirement and the literacy test only claim to measure and report on what all students are expected to be able to demonstrate by the end of Grade 9. All aspects of the curriculum that are not common to all students as a collective were, thus, excluded from consideration. Working within the parameters of the measurement context is significant for this inquiry. Rather than outright challenging the measurement context or even the specific type of assessment tool being used, this instance of validity research first sought to understand if the test being used is at least able to achieve what it claims to be able to achieve, which is measuring and reporting on students' literacy proficiency. It is helpful to reflect on how the curriculum's construct sample is narrowed because of the parameters of the measurement context though.

Following this, I identified a common literacy curriculum in particular (*Phase 2*). The challenge in working with the Ontario curriculum is balancing and making connections between the philosophies and the values that appear in the peripheral matter of the curriculum with the learning expectations for each course. The terms *literacy* and *literacies* are not often used within the curriculum expectations, and concepts of what literacy entails are presented across the curriculum in many different ways. I developed a composite construct to amass all of the many different iterations of what literacy entails for Ontario education. The items included in the overview of the mapping results do not often refer to literacy explicitly, but the skills that are emphasized related to at least one of the iterations of what literacy entails presented in the curriculum. I complemented the curriculum analysis with readings of supplementary documents created by the OMOE (*Phase 3*) to expand and enrich my readings of the curriculum.

I then refined the developing composite construct into an expected literacies construct (*Phase 4*). The refined construct includes only what is explicitly expected of all students, since only what is explicitly expected of all students is relevant to the measurement context in the case of a high-stakes standardized assessment. This refined construct provides a strong foundation for investigating what a measurement of students' literacy achievement could potentially measure and report on. Given the limitations imposed on the design of this construct because of the specific parameters of the measurement context, when assessing how well the literacy test represents this construct, judgements are based on what a standardized test in particular makes possible. It is possible other measurement tools that are not standardized and measuring all

students as a common collective might be better able to assess the nuances that are excluded from this particular instance of construct analysis.

Identifying a literacy construct for the curriculum that is relevant to the measurement context, thus, included determining a common curriculum, determining a common literacy curriculum, consulting supplementary resources, and then refining the construct to identify the expected literacy curriculum. These four phases are presented in greater detail in Appendix B. In the sections that follow, I present the results of the construct analysis for Part One of the expanded mapping. I then present a discussion of these results.

Presentation of the Results for Part One. Table 7 presents an overview of the literacy construct I have developed that is reflective of what is expected of students writing the literacy test. The full expected literacy construct is presented in Appendix C as part of the full comparative mapping of the curriculum and the test.

Table 7. *Overview of the Expected Literacy Construct for Ontario Education*

Literacy (General)	
• Using oral communication skills (Mathematics, p. 27) • Listening (English, p. 3), Speaking (French as a Second Language, p. 48), “[D]iscussing” (Arts, p. 51) • Using written and visual communication skills (Mathematics, p. 27) • Writing (English, p. 3) • Representing (Geography, p. 51) • “[C]ommunicating with words and with the body” (Health and Physical Education, p. 70) • Expressing oneself (French as a Second Language, p. 48) and one’s thoughts and feelings (Arts, p. 51) • Communicating understanding (Arts, p. 51) • Developing and using “critical thinking skills” (Health and Physical Education, p. 70) • Analyzing (Science, p. 39) • Thinking “creatively” (Health and Physical Education, p. 70) • Developing and selecting “appropriate methods” (Science, p. 40) • Evaluating the effectiveness of texts (English, p. 34) • Developing identity (English, pp. 34) • ‘Defining thoughts about oneself, others, and the world’ (French as a Second Language, p. 36) • Supporting opinions (English, p. 3) • Understanding “language and its structure” (French as a Second Language, pp. 35-36) • Using language with “precision” (Science, p. 40) • Focusing on purpose and audience (English, p. 3) • Interpreting symbols (Arts, p. 52) • Reading (English, p. 3)	• Engaging with diverse texts (History, p. 48) • Practicing movement (Health and Physical Education, p. 71) • Planning and conducting inquiries and investigations (Science, p. 40) • Asking questions (History, p. 49) • “[L]ocat[ing]” information (English, p. 34) • “[E]valuat[ing]” information (OMOE, 2008, <i>Reach Every Student</i>, p. 6, as cited in Geography, p. 50) • Using a variety of sources (Science, p. 40) • Recording observations (Mathematics, p. 27) • Presenting ideas/findings (Science, p. 39) • Applying reasoning (Health and Physical Education, p. 71) • Explaining reasoning; Justifying results (Mathematics, p. 27) • Exploring and determining solutions (Arts, p. 53) • Solving problems (Mathematics, p. 27) • Reflecting (Arts, p. 52) • Offering critiques (Arts, p. 51) • “[C]onnecting learning to past experiences” (French as a Second Language, p. 48) • “[A]pply[ing] metacognitive knowledge and skills” (French as a Second Language, p. 48) • Using discipline-specific skills and understanding discipline-specific language (Science, pp. 39-40) • Developing an understanding of concepts (Arts, p. 51) • Addressing “issues of fairness, equity, and social justice” (Arts, p. 51, Health and Physical Education, p. 70)

Critical Literacy	Scientific Literacy
- Analyzing sources (<i>investigating multiple perspectives</i>) (History, p. 37) - Understanding influence of a text on readers and intentions of creators (Geography, pp. 52-53, Health and Physical Education, pp. 72-73) “[D]etermining the intended audience” of a text (History, p. 37) - Interpreting (Science, p. 38) “[S]ynthesiz[ing] information” (Geography, p. 3) - Assessing texts (Science, p. 38) - Learning techniques used to create texts (e.g., media techniques, art techniques) (Arts, p. 41) ‘Understanding self, other, and world’ (English, p. 5) “[B]ecom[ing] [a] reflective, critical, independent” learner (English, p. 5) “[B]e[ing] aware of points of view” and context(s) (Geography, p. 53) “[I]dentify[ing] perspectives, values, [bias], and issues” (English, p. 34) “[F]ocusing on issues related to [. . .] social justice” (Arts, p. 53) and fairness (Health and Physical Education, p. 72) - Communicating (French as a Second Language, p. 3) - Using “drama conventions” to communicate multiple perspectives (Arts, p. 42) “[A]sking questions” (English, p. 34) “[A]sking [. . .] who benefits from the text” (Health and Physical Education, p. 72)	- Understanding “what scientists, engineers, and technologists do as individuals and as a community” (Science, p. 4) - Understanding “how scientific knowledge is generated” (Science, p. 4) and ‘the costs and benefits’ of using scientific knowledge - Initiating and planning (Science, pp. 17, 19) “[P]lanning investigations” (Science, p. 19) and selecting methods “Identify[ing] problems/issues to explore” (Science, p. 20) “Formulat[ing] questions” (Science, p. 20) “Mak[ing] predictions, develop[ing] hypotheses” (Science, p. 20) “Identify[ing] and locat[ing] research sources” (Science, p. 20) - Planning for safety (Science, p. 20) - Performing and recording (Science, pp. 17, 19) - Conducting research safely (Science, p. 19) “[G]athering, organizing, and recording information” and observations (Science, pp. 19-20) “[C]ontrol[ing] variables” (Science, p. 20) “Acknowldg[ing] sources” (Science, p. 20) - Analyzing and interpreting (Science, pp. 17, 19) - Identifying “patterns and relationships” (Science, p. 20) “Draw[ing] conclusions” (Science, p. 20) “Justify[ing] conclusions” (Science, p. 20) - Evaluating ‘relevance’ and ‘reliability of data’ (Science, p. 20) “Identify[ing] sources of error or bias” (Science, p. 20) - Communicating (Science, pp. 17, 19) - Communicating “ideas, procedures, and results” using a “variety of forms” (e.g., “linguistic, numeric, symbolic, and graphic modes”) (Science, p. 19) “Express[ing] results accurately and precisely” (Science, p. 20)
Information Literacy	Game Literacy
- Creating texts (i.e., art works) (Arts, p. 56) “[D]esign[ing] [inquiry] questions” for discipline-specific inquiries (History, p. 53) “[L]ocat[ing]” information (English, p. 35) “[S]elect[ing]” information (English, p. 35) “[G]ather[ing]” information (History, p. 52) “[P]rocess[ing]” information (Geography, p. 54) “[C]ritically evaluat[ing]” information (English, p. 35) - Working with “digital, print, and visual resources for projects” (History, p. 53) “[C]ommunicat[ing] information” (English, p. 35) - Communicating “findings for different audiences, using a variety of formats [. . .]” (Geography, p. 54) - Using information to “explore and investigate issues” (Arts, p. 55) - Using information to “make decisions” (Health and Physical Education, p. 74) - Using information to “create personal meaning” (English, p. 35)	- Using critical and creative thinking skills (Health and Physical Education, p. 32) “[T]hinking strategically” (Health and Physical Education, p. 32) “[D]evising and apply[ing] strategies and tactics” (Health and Physical Education, p. 32) - Understanding game structure and mechanics (Health and Physical Education, p. 32) - Understanding how to group and categorize games (Health and Physical Education, p. 32) “[M]ak[ing] connections between different games and game components” (Health and Physical Education, p. 32) “[T]ransfer[ring] strategies, tactics, and skills from one game or activity to another in the same category” (Health and Physical Education, p. 32) - Increasing one’s “ability to participate successfully in a wide range of games and other activities” (Health and Physical Education, p. 32)

Physical Literacy	Health Literacy
• Developing and using language and communication skills (Health and Physical Education, p. 70) • Developing and using oral communication skills (Health and Physical Education, p. 70) • Talking about “a range of topics in health and physical education” (Health and Physical Education, p. 71) • Developing and using “thinking skills” (Health and Physical Education, p. 70) • Developing “movement skills” (Health and Physical Education, p. 27) • Developing “movement competence” (Health and Physical Education, p. 27) • “[E]xploring” and “understand[ing] ideas and concepts” (Health and Physical Education, p. 71) • Analyzing (Physical and Health Education Canada, “What is Physical Literacy,” as cited in Health and Physical Education, p. 7) • ‘Organizing personal experience and knowledge’ (Health and Physical Education, p. 71) • “[I]dentify[ing] and solv[ing] problems” (Health and Physical Education, p. 71) • Participating in “physical activities” (Health and Physical Education, p. 27) • Applying motor skills and “movement concepts, strategies, and principles” (Health and Physical Education, p. 27)	• Developing and using language and communication skills (Health and Physical Education, p. 70) • Developing and using “thinking skills” (Health and Physical Education, p. 70) • “[U]nderstand[ing]” information (Irving Rootman and Deborah Gordon-El-Bihbety, <i>A Vision for a Health Literate Canada</i>, 2008, as cited in Health and Physical Education, p. 7) • ‘Understanding the connections’ between “active living, movement competence, healthy living, and living skills” (Health and Physical Education, p. 10) • “[D]evelop[ing], maintain[ing], and enjoy[ing] healthy living” (Health and Physical Education, p. 34) • “[S]et[ting] goals” (Health and Physical Education, p. 34) • “[S]olv[ing] problems” (Health and Physical Education, p. 34) • “[M]ak[ing] decisions” (Health and Physical Education, p. 34)
Media Literacy	Musical Literacy
• Developing an understanding of media techniques (English, p. 115) • Recognizing media text forms and conventions (English, p. 115) • Recognizing beliefs, values, and special interests in media texts (English, p. 115) • Recognizing multiple interpretations of texts (English, p. 115)	• Understanding and using “the variety of ways in which meaning is communicating through music” (Arts, p. 179) • Using the reading, writing, and aural skills relevant to music education (Arts, p. 179) • Using “notation, symbols, and terminology” (Arts, p. 179) • “[S]inging, playing, moving, performing, creating, and listening” (Arts, p. 16) • Responding to music and musical experiences (Arts, p. 16)
Spatial Literacy	French or FSL Literacy
• Developing and using spatial skills (e.g., “map, globe, and graphing skills”) (Geography, p. 28) • Analyzing diverse graphic texts (History, p. 24) • “[M]aking meaning of maps and graphs” (History, p. 24) • “[G]athering data or information” (History, p. 24) from digital and/or visual texts (e.g., “online atlases or interactive maps” (p. 24)) • “[C]onstruct[ing]” diverse “graphic texts” (History, p. 24)	• Developing and using oral communication skills (French as a Second Language, p. 48) • “[D]eveloping strategies” (French as a Second Language, p. 48) • “[U]nderstand[ing]” texts (French as a Second Language, p. 48) • Talking about texts (French as a Second Language, p. 48) • Writing about texts (French as a Second Language, p. 48) • “[P]resent[ing] [. . .] ideas” (French as a Second Language, p. 48)
Arts/Artistic Literacy	Visual Literacy
• Understanding “what artists, musicians, actors, and dancers do as individuals and as a community” (Arts, p. 4) • “[U]nderstanding [. . .] how ideas are generated in the various arts” (p. 4) and the benefits associated with the arts • Expressing oneself artistically (Arts, p. 4) • “[R]estructuring personal ideas and experiences” (Arts, p. 4) • “[P]erceiving” and interpreting the “world through exploration and experimentation” (Arts, p. 4)	• “[I]nvestigat[ing] and understand[ing] [. . .] media [. . .] and art works” (Arts, p. 17) • “[D]eveloping the ability to respond to [. . .] and analy[z]e works of art” (Arts, p. 17) • Learning to communicate understanding (Arts, p. 17) • Expressing oneself “in visual ways” (Arts, p. 17) • Engaging with “a broad range of forms, genres, and styles” (Arts, p. 17) • (e.g., “traditional arts of drawing, painting, sculpting, printmaking, architecture, and photography, as well as commercial art, traditional and fine crafts, industrial design, performance art, and electronic and media arts” (Arts, p. 17))

Financial Literacy	Mathematical Literacy
• “[I]nvestigat[ing] the impact of economic factors” (History, p. 47) and exploring community responses • Analyzing financial risks (Health and Physical Education, p. 69) • Considering consumer choices in relation to “health and well-being” (Health and Physical Education, p. 69)	• “[U]sing diagrams, tables, graphs, calculations, and equations to represent quantitative data” (Science, p. 40) • Reading graphs (History, p. 49) • Interpreting maps (Geography, p. 51) • “[T]racking changes” in health and fitness (Health and Physical Education, p. 74)
Multiple Literacies	Linguistic Literacy
• Learning “about different art forms” (Arts, p. 54) • “[I]nterpret[ing]” and communicating meaning (Arts, p. 54) • Using ‘visual, oral, gestural modes of expression’ (Arts, p. 54) • Preparing “to adapt to change” (Arts, p. 55)	• Using “different means of expression” (Arts, p. 55) • Developing an understanding of artistic languages (Arts, p. 55)
Environmental Literacy	Historical Literacy
• Questioning and examining human impact on the environment (Science, p. 36)	• Analyzing (<i>i.e., investigating multiple perspectives using</i>) “evidence from primary and secondary sources” (History, p. 7)
Technological Literacy	Food Literacy
• Critically evaluating information (Science, p. 3)	• <i>Not Represented</i>

Note. All language used to develop the expected literacy construct (see Appendix B and Appendix C), as well as this overview, is derived from the Ontario curriculum. The following curriculum documents are reflected in the expected literacy construct: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); and Science (OMOE, 2008).

Discussion of the Results for Part One. In the sections that follow, I discuss the results of the first part of the construct analysis which identified what a literacy construct for the curriculum might include. Reflecting on how literacy can be conceptualized in relation to the established parameters of the measurement context, I address: (a) what literacy entails for Ontario education; (b) the plurality of literacies; and (c) the (cross-)/(multi-)/(inter-)disciplinarity of literacy for Ontario education.

What is literacy for Ontario education? Based on the construct mappings, the most comprehensive understanding of literacy that I am able to develop for Ontario education is that there is a general literacy concept presented across the curriculum, and there are also many specialized types of literacy framing literacy education in Ontario. These types of literacy are not represented throughout the curriculum as all being related. See the detailed analytical notes presented in Appendix B for more information about how I came to this conclusion about the fragmented nature of the Ontario curriculum as a result of the analysis performed during Phase 2.

Based on the expected literacy construct, literacy seems to be about communication where communicating occurs through speaking, listening, discussing, reading, writing, representing, and expressing oneself. Literacy is characterized as supporting opinions (OMOE, 2007, p. 3), focusing on purpose and audience (OMOE, 2007, p. 3, 2013a, p. 37), and using language with

“precision” (OMOE, 2008, p. 40). An application of literacy that is emphasized throughout the curriculum is engaging in thinking and inquiry processes (OMOE, 2015b, p. 70, 2013a, p. 53). As presented in the curriculum documents, literacy includes thinking creatively (OMOE, 2015b, pp. 32, 70), thinking critically (OMOE, 2007, p. 5, 2008, p. 3, 2015b, pp. 32, 70), solving problems (OMOE, 2005, p. 27, 2015b, pp. 34, 71), explaining and applying reasoning (OMOE, 2005, p. 27, 2015b, p. 71), analyzing (OMOE, 2008, pp. 17, 19, 39, 2013a, pp. 7, 24, 37, 2015b, p. 69), interpreting (OMOE, 2007, p. 115, 2008, pp. 17, 19, 38, 2009, pp. 4, 52, 2013b, p. 51), making decisions (2015b, pp. 34, 74), and evaluating diverse texts (OMOE, 2007, p. 35, 2008, pp. 3, 20). Addressing “issues of fairness, equity, and social justice” (OMOE, 2009, p. 51) is highlighted as a literacy engagement. Literacy also appears to be about the ability to develop, reflect on, and improve one’s skills and one’s ability to engage (OMOE, 2007, pp. 5, 115, 2008, p. 40, 2009, p. 17, 52, 2013b, p. 28, 2014b, p. 48, 2015b, pp. 27, 70), and it is about developing understandings of ‘oneself, others, and the world’ (OMOE, 2014b, p. 36).

The plurality of literacies. The level of complexity reflected in even just this partial construct that relates to the measurement context challenges the binary of literacy as reading and writing established by the OMOE for the literacy graduation requirement (see OMOE, 2011b, p. 56), which is echoed by EQAO for the OSSLT (see EQAO, 2015f, p. 82). While the term *literacies* has not been taken up by the OMOE as a way to explain the many types of literacy that are presented throughout the curriculum, I feel this term is an appropriate characterization of the multiplicities of literacy presented across the curriculum. The presentation of at least twenty different literacy concepts, including a concept of multiple literacies, suggests that literacies are multiple. If a literacy lens is going to continue to be used to shape education in Ontario, there is a need to more clearly present the relationships that exist across the multiple types of literacy presented in the curriculum. It is problematic that students go from one course to another where literacy might be conceptualized quite differently without adequate space in each context to be expected to critically consider the application and use of the diverse knowledges and skills they are developing across the disciplinary contexts.

The (cross-)/(multi-)/(inter-)disciplinarity. As represented in the overview of the expected literacy construct, literacies are presented in siloed and discipline-based ways across the Ontario curriculum. It is unclear how a general concept of literacy relates to any of the specialized types of literacy or how any of the specialized types of literacy relate to one another. It is perhaps

helpful to consider how the literacies captured in the Ontario curriculum could be described as cross-disciplinary, multi-disciplinary, or inter-disciplinary. I understand *cross* as a prefix that indicates something that relates and/or belongs to more than one, *multi* as a prefix that indicates something that comprises more than one, and *inter* as a prefix that indicates something that can be between two or more. These understandings align with definitions presented in the Oxford English Dictionary (OED Online, 2016, see Cross, adj., Def. 1, Multi-, comb. form, Def. 1, Inter-, prefix, Def. 1). Each of these prefixes can be added to the term *disciplinary* to differently characterize different types of literacy constructs.

The construct I have defined through multiple mappings reflects what might emerge should the contributions of each discipline be integrated within a broad conceptualization of what it means to engage with literacies and/or demonstrate literacy achievement. An overarching literacy construct can illustrate how disciplinary perspectives of literacy might differ, and it can provide a space for highlighting unique disciplinary contributions that are made to an overall literacy construct. In addition to observing how a general concept of literacy was developing across the curriculum, I also observed how concepts of different types of literacy were developing in the multiple curriculum documents being reviewed. The next level of synthesis, which would bring together the cross- and multi-disciplinary aspects of literacy to begin nuancing literacy as an interdisciplinary concept, is not reflected in the curriculum. If disciplinary knowledges and disciplined ways of viewing the world are significant and offer students novel ways of coming to understand and engage with the world, understanding literacy as more than just a cross-disciplinary and multi-disciplinary concept is needed. The general concept of literacy, which is presented in the expected literacy construct, does not incorporate the many types of literacy being introduced throughout the curriculum documents though.

As a result of the fragmentary representation of literacy types that are differently presented across the multiple subject areas, there are many partial and selective sample literacy constructs that are abbreviated and challenging to reconcile or synthesize cohesively. Instead of presenting any unified literacy construct, literacy remains largely fragmented as a myriad of knowledges and skills currently spread across the Ontario curriculum. While this is a very postmodernistic approach to curriculum development, it is difficult to understand how students' learning across the curriculum is intended to come together as part of a literacy curriculum. Moreover, it is difficult to design and implement a high quality test-based accountability program in Ontario that

is intended to measure and report on students' literacy skills and achievement. It is concerning that, despite having a literacy graduation requirement, the Ontario curriculum does not present a more cohesive and comprehensive literacy construct.

Part Two: Literacy and the Test

For the second part of the expanded construct analysis mapping process, I identified what a literacy construct for the test might look like (*Phase 6*), and I reflected on the results of this mapping (*Phase 7*). EQAO suggests that the skills they measure are a sufficient basis upon which they can report on students' achievement (see EQAO, 2015f, p. 83). Through a comparative mapping of the curriculum and the test, it becomes possible to assess the representativeness of the test's construct sample in relation to the curriculum's construct sample. In the sections that follow, I present the results of the construct analysis for Part Two of the expanded mapping. I then present a discussion of these results.

Presentation of the Results for Part Two. The literacy construct I designed for this inquiry that is reflective of the test parallels the expected literacy construct for Ontario education in that both constructs are fragmented. The nature and scope of the fragmentation differs between these two contexts though. The expected literacy construct for Ontario education consists of a general concept of literacy followed by twenty types of literacy that are distinctly introduced in the curriculum through disciplinary lenses. The OSSLT's literacy construct, in contrast, can be represented as a construct consisting of two parts: Reading and Writing. Figure 7 presents a mapping of how EQAO articulates what is being measured. I designed a literacy construct that reflects the OSSLT based on EQAO's (a) descriptions of the testing practice (e.g., curriculum connections, planning and preparation guides); (b) scoring guides; (c) technical reports; and (d) reporting documents (e.g., the Individual Student Reports). Including multiple different sources that characterize what the literacy test measures and reports on is important for considering how the test is described, what EQAO claims to measure in the technical reports, and also what appears to actually be measured and reported on through both the scoring guides and the Individual Student Reports in particular. A full version of this literacy construct is presented in Appendix D along with a discussion about the significance of distinguishing between the different types of documents that were consulted for this analysis.

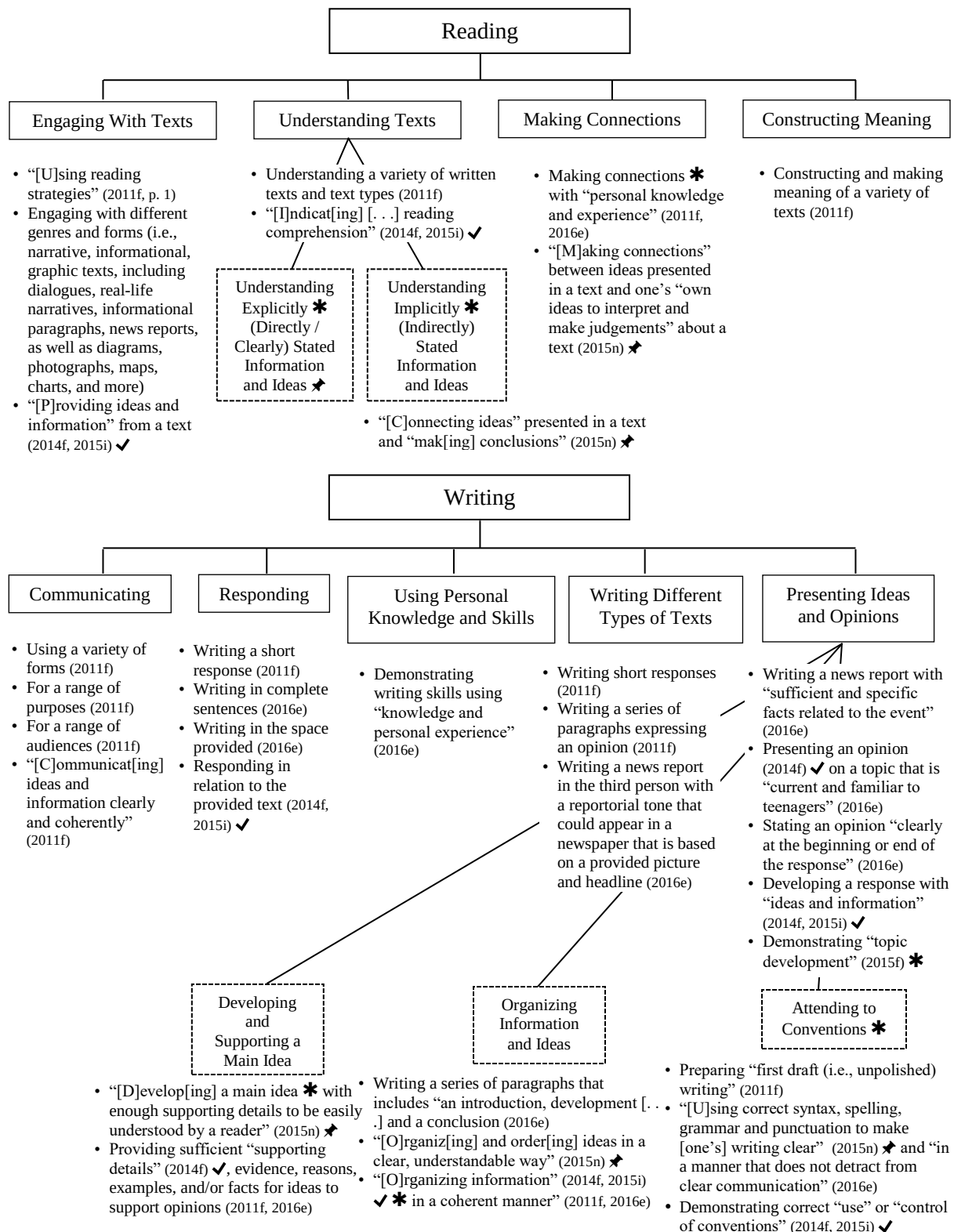


Figure 7. A Representation of a Literacy Construct for the Test

Note. All language used in this mapping is derived from EQAO’s documentation about the OSSLT (see EQAO, 2011f, 2014f, 2015f, 2015i, 2015n, 2016e; W. T. Rogers, 2013). A full version of this construct is presented in Appendix D. ‘✓’ = Reflected in scoring guides (i.e., a skill that is measured); ‘✎’ = Reflected in Individual Student Report (i.e., a skill that is reported on); ‘*’ = Reflected in technical reports (i.e., a skill assigned to a test item).

‘Discussion of the Results for Part Two. The literacy construct for the test is intended to reflect what EQAO claims to measure. In the sections that follow, I discuss (a) what literacy entails in the testing context, (b) the evaluative gaps that exist with respect to how the test construct is echoed in the scoring guides, and (c) the reading and writing binary of the construct.

What is literacy for the OSSLT? The most comprehensive understanding of literacy that I am able to develop based on EQAO’s resources regarding the OSSLT is that literacy is the ability to apply reading skills and writing skills. Applying reading skills seems to be about engaging with texts, understanding texts, making connections, and constructing meaning. Applying writing skills seems to be about communicating, responding, using personal knowledge and skills, writing different types of texts, and presenting ideas and opinions.

Evaluative gaps. Each category listed in the construct should be echoed in the scoring guides. The lack of references to the scoring guides in a few instances suggests that there are evaluative gaps in terms of what EQAO claims to evaluate and what they evaluate according to the released evaluation tools. The specific skills that are evaluated through the OSSLT are identified in the construct mapping as R1, R2, R3, and W1, W2, W3, and, in the case of the technical reports, also W4 (see EQAO, 2011d, pp. 167-168). When EQAO describes what is evaluated through the OSSLT, additional skills are mentioned, but these skills are not reflected in the scoring guides. It is unclear what assumptions and inferences are being implicitly made during the evaluation, which might explain how EQAO measures something other than the six skills.

For example, reading a graphic text is listed as part of the test construct within the first category, “Engaging With Texts.” The specific experience of reading a graphic text does not appear to be evaluated though. It is unclear how this item of the construct relates to how test performances are being evaluated. There is no explicit indication in the technical reports or in the scoring guides that genre knowledge, or anything specific to the experience of reading a graphic text, is being measured. An argument could be made that genre knowledge is required for the OSSLT and that genre knowledge is implicitly being measured; however, these assumptions are not presented. This gap in the construct might exist because the test items that relate specifically to the graphic text are all multiple choice questions. While EQAO provides rubrics and anchor responses with explanations of sample evaluations to illustrate how open-response items are being evaluated, for the multiple choice test items, only a list of correct responses is provided. There is no explanation of how EQAO is evaluating skills through the multiple choice questions.

In other instances, it is not clear how even the explicitly identified six skills are being measured and evaluated. For example, making connections is identified as ‘Reading Skill 3’ or ‘R3’ (see EQAO, 2011d, pp. 167-168), and EQAO asserts through multiple documents that they are evaluating students’ ability to make connections. In a list of test specifications, for instance, EQAO (2011f) claims to evaluate how students make “connections between information and ideas in a reading selection and personal knowledge and experience” (p. 2). Making connections is also included as part of the Individual Student Reports. When students receive their test results, they are even informed if they are able to “connect ideas from a text to [their] own ideas to interpret and make judgements about what the text is saying” (EQAO, 2015n) or if they need to improve their ability to make these connections. Students’ ability to make connections between what they read and their own personal “knowledge and experience” (EQAO, 2011f, pp. 1-2, 2016e, p. 3; W. T. Rogers, 2013, p. 10) is not explicitly evaluated according to the released scoring guides though. Both the news report and the dialogue test items, which are open-response reading items, are intended to measure making connections; however, the rubrics for these test items focus on “indicat[ing] [. . .] reading comprehension” by “provid[ing] [. . .] ideas and information from the reading selection” (see EQAO, 2015i, Section I News Report, 2014f, Section IV Dialogue). There is no mention of connecting what is read to anything else.

The reading and writing binary. The test’s literacy construct is divided into two distinct parts with no overarching conceptualization of what literacy entails beyond this binary. It is not clear why reading and writing are the only skill sets that EQAO includes within a conceptualization of literacy other than perhaps that this is how the literacy graduation requirement describes the focus of the accountability program. In the OED, literacy is defined as the “quality, condition, or state of being literate; the ability to read and write” (OED Online, 2016, Literacy, Def. 1). Literacy is also presented as a “modifying word,” and it is recognized as being “competence or knowledge in a particular area” (OED Online, 2016, Literacy, Def. 2). The literacy graduation requirement and the OSSLT seem to be based on the first definition; however, the second definition of literacy aligns best with how the term *literacy* is presented across the curriculum. Throughout the curriculum, literacy is a term that is continuously modified and situated in a particular context. The accountability program in Ontario is being used to determine if students are in a satisfactory “state of being literate” (OED Online, 2016, Literacy, Def. 1); however, basing the assessment on only reading and writing skills is limiting given the complex ways in

which literacy is expanded conceptually across the curriculum. In the test's construct, two distinct skill sets are identified without there being any indication of how these skill sets are related to one another. The reading and writing sections of the OSSLT have always strived to be distinct in terms of which skill is being evaluated at any given time. Despite EQAO's efforts to isolate reading and writing skills, there is cross-over between reading and writing skills not only when students are engaging with the test items but also in terms of how the test items are being evaluated by EQAO. For example, some of the reading comprehension test items are dependent on, and evaluated based on, a student's ability to state a main idea (in writing) and to support that idea (in writing) with ideas and information. Stating a main idea and supporting that idea with ideas and information is one of the ways in which students' writing skills are also being evaluated. In 2006, the testing practice moved from reporting a distinct reading score and a distinct writing score to reporting a single literacy score (see Radwan, Reckcase, & Rogers, 2010); however, the OSSLT's construct remained unchanged. The design of the test does not acknowledge or build on the interconnectedness of literacy skills.

Part Three: Mapping the Curriculum and the Test

The third part of the construct analysis process includes a comparative mapping of the curriculum and the test constructs that were developed in the first two parts. In the sections that follow, I present a critical review of how EQAO presents connections between the curriculum and the test (*Phase 8*), the results of an alternative mapping of the curriculum and the test (*Phase 9*), and a discussion of the results of Part Three of the construct analysis process (*Phase 10*), which concludes the expanded mapping. In the discussion of the results, I highlight the wealth of data that can be constructed using the mapping methods presented in this chapter.

A Critical Review of EQAO's Curriculum and Test Connections. As part of the expanded mapping process, I considered how EQAO presents their construct work, and, in particular, how EQAO explains the test's relationship to the Ontario curriculum. Following a review of the quality of their assessment programs, it was recommended that EQAO "[d]evelop, and make publicly available, framework documents for each assessment that outline the links between the construct definitions for reading, writing, literacy and mathematics, the skills being measured and the expectations as presented in Ontario curriculum documents" (EQAO, 2004b, p. 8). This recommendation essentially asked for (1) theoretical construct definitions, (2) connections between the construct definitions and the skills being measured, and (3) connections between the

construct definitions and curriculum expectations. An argument for the quality and the validity of a testing program needs to be construct-based. In response to the recommendation, EQAO noted they would “[u]pdate the framework for each assessment to clearly identify its purpose and its links to *The Ontario Curriculum*” (EQAO, 2004a, Enhancements to Assessment Design section). Although EQAO justifies the test in terms of the curriculum (EQAO, 2008a, 2011f), the methods used to identify how the test relates to the curriculum are limited. In EQAO’s (2011f) presentation of curriculum connections, there is a section entitled, “Definition of Literacy for the OSSLT” (EQAO, 2011f, p. 1); however, there is no definition of how literacy is defined in the Ontario curriculum. A selection of curriculum expectations from Grade 7, 8, and 9 subject areas are identified, and these expectations are associated with either reading and/or writing skills. It is not clear how the expectations were selected, nor is it clear why particular subject areas are being considered and why others are excluded from the mapping. Identifying a few instances where excerpts of the curriculum connect with the test is insufficient.

In the sections that follow, I consider the limitations of EQAO’s comparative analysis focusing on: (a) the unjustified construct, (b) EQAO’s role in designing a literacy curriculum, (c) the confirmatory practices used, (d) the differences between relatedness and representativeness, (e) the scope of the literacy curriculum, and (f) the lack of process information.

Unjustified construct. The curriculum’s literacy construct that was presented in Part One demonstrates that literacy is much more than reading and writing. There is a quotation in the introduction to the English program citing the United Nations Educational, Scientific and Cultural Organization (UNESCO) that explicitly states, “Literacy is about more than reading or writing” (as cited in OMOE, 2007, p. 3). Reading and writing are not overarching concepts used to structure literacy programming in Ontario. The literacy graduation requirement and the OSSLT are based on an unjustified literacy construct. Radwan et al. (2010) refer to the broader construct that the OSSLT is intended to represent as a “hypothetical construct of literacy” (p. 5). This language suggests that there is no clearly defined literacy construct upon which the OSSLT is based. As test developers, EQAO is responsible for defining, at the very least, the literacy construct sample of the curriculum, which is the foundation for the test’s construct sample.

Designing a literacy curriculum. It could be argued that through the literacy graduation requirement, the OMOE is defining literacy education for Ontario education as reading and writing. More precisely, through the literacy test, EQAO is defining the three reading skills and

the three writing skills that are representative of that literacy construct. EQAO also indicates how the Ontario curriculum relates to reading and writing; thus, EQAO is designing a literacy curriculum. If an accountability program focused on literacy education is going to continue to exist in Ontario, there is a need for a strong, a clear, and a consistently articulated literacy curriculum that corresponds with a unified literacy construct such that the validity of using the accountability program can be assessed. Without a theoretical foundation from which assessment decisions can be made, it is unclear what rationale there could be for assessing particular performances in a particular context. When there is no “specific theoretical model” (Klem et al., 2015, p. 196) that can be used, as was the case in a construct validation study of a language screening tool for four-year olds in Norway, test developers are left to determine what should be evaluated and how the test performances might be indicative of the construct they aspire to be able to measure and report on. Without any specific theoretical construct, the Norway language screening tool “a broad approach to language assessment by including several tasks concerning different linguistic subskills” (Klem et al., 2015, p. 196). These design decisions would likely be hard to adequately justify. EQAO’s approach to designing the OSSLT appears to have gone the other way by limiting what is being evaluated rather than attempting to evaluate many of the literacy skills outlined in the Ontario curriculum.

Confirmatory practice. There appears to be a ‘confirmatory’ or ‘confirmationist’ bias (Kane, 2001) in how EQAO performs their curriculum mapping. EQAO uses deductive reasoning by working with the literacy construct they have defined to search the curriculum for evidence that reading and writing skills are expected in the curriculum. Rather than mapping out the curriculum as an inquiry practice to identify a broader literacy construct, EQAO appears to be searching for specific instances of their construct (i.e., reading and writing skills). EQAO uses this practice to confirm that their test construct relates to the curriculum. The approach EQAO uses can be considered a “top-down” (Trochim, 2006) approach where understanding is imposed. EQAO’s inquiry is pre-emptively narrowed to focus only on reading and writing, and there is no demonstrated attempt to situate this literacy construct more broadly in terms of the curriculum. EQAO does not situate the test’s construct sample of six particular skills in relation to how reading and writing are even potentially more broadly represented across the curriculum. EQAO frequently states that the OSSLT is based on the Ontario curriculum (e.g., EQAO, 2015f, p. 83), but a more appropriate claim would be that the OSSLT is related to the Ontario curriculum.

Whereas deductive reasoning is “more narrow in nature and is concerned with testing or confirming hypotheses” (Trochim, 2006), inductive reasoning is “more open-ended and exploratory” (Trochim, 2006). The expanded construct analysis mapping presented in this chapter is based predominantly on inductive reasoning. Observations of the curriculum yielded a developing theorization of how literacy is conceptualized throughout the common curriculum, and observations of the testing practices made it possible to theorize how EQAO seems to be conceptualizing literacy. This approach to construct analysis is more of a “bottom up” (Trochim, 2006) approach where understanding is being constructed and represented. The initial mapping was more reflective of a deductive process, since that mapping was directed by a defined theoretical literacy construct. Beginning with a defined theoretical construct is the necessary foundation upon which construct samples can be established and assessed though.

Relatedness and representativeness. EQAO claims that the reading and writing skills evaluated through the OSSLT “are representative of those expected in *The Ontario Curriculum* for all subjects up to the end of Grade 9” (EQAO, 2011f, p. 1). EQAO also states that the “reading passages on the OSSLT” and the “written forms in which students are asked to write are representative of those expected in *The Ontario Curriculum* for all subjects up to the end of Grade 9” (EQAO, 2011f, p. 1). There is no evidence provided by EQAO to sufficiently support any claim of representativeness. The curriculum connections are used to position the literacy test in relation to the Ontario curriculum; however, EQAO’s mapping does not provide any solid basis upon which an argument of representation can be made. When presenting the curriculum connections, EQAO (2011f) even notes that the curriculum “expectations listed are only a sample” and “[m]any other expectations in the curriculum documents relate directly or indirectly to the skills measured on the OSSLT” (p. 1). EQAO’s mapping does not explain how the OSSLT could be derived from the curriculum or how the literacy test is representative of literacy education. Relevancy alone is insufficient for asserting the quality of the OSSLT.

Claiming to report on students’ literacy achievement “based on reading and writing curriculum expectations across all subjects in *The Ontario Curriculum*, up to the end of Grade 9” (EQAO, 2015f, p. 83) sets high expectations for what this large-scale standardized test is able to achieve. An argument of this level of representation would need to address (a) why reading and writing are the only two distinct skill sets being measured through the test when literacy is the focus; (b) what the expected continuum of learning from Kindergarten through Grade 9 looks

like, and how students' skills are expected to develop over the years; (c) what a common curriculum looks like for this standardized measurement practice, and why it is acceptable to exclude the skills that students are developing through uniquely streamed programs of study in Grade 9; (d) how literacy is being conceptualized to transgress the disciplinary boundaries that structure the Ontario curriculum; and (e) why the test's construct exclusions are acceptable. It is necessary to understand and to clarify what the data produced through the testing program are and are not able to say about students' literacy achievement.

Scope of the literacy curriculum being considered and evaluated. The scope of EQAO's alignment of the test with the curriculum fails to demonstrate and take into consideration the parameters of the measurement context. The literacy graduation requirement, and consequently also the OSSLT, focus on all students' literacy achievement until the end of Grade 9. The standardization of the accountability program is significant. As noted in Chapter 2, students should only be evaluated on what they have had the opportunity to learn when there are high-stakes involved (AERA, 2000). EQAO acknowledges this when they state, "The international standards for large-scale graduation-requirement tests state that students should not be tested on knowledge and skills they have not been taught" (EQAO, 2011f, p. 1). The literacy graduation requirement should be able to be customized to correspond with the literacy education that each student is expected to achieve based on the educational trajectory they pursue. Failing this, at the very least, a common literacy curriculum needs to be designed such that it is clear what all students as a collective are expected to achieve in relation to the established parameters of the measurement context. What the evaluation methods make possible is not a persuasive enough argument for why a particular part of a construct should or should not be evaluated with high-stakes consequences though. It should not be the "ease of scoring" that "determine[s] assessment policy" (Shepard, 2010, p. 890). The common literacy curriculum is only a sample of the broader literacy construct reflected in the curriculum. An argument is needed to justify the parameters of the measurement context and the narrowing of the broader literacy constructs.

EQAO works with many courses when mapping the curriculum connections for the OSSLT that should be omitted from any justification for using the testing program. The following are a few examples of courses that EQAO includes in their initial curriculum connections (see EQAO, 2008a) that should be excluded from consideration on the grounds that not all students are expected to take these courses prior to writing the test; thus, all students cannot be held

accountable for these expectations: Comprehensive Arts, Dance, Dramatic Arts, Visual Arts, Music, Guidance and Career Education, Introduction to Business, Native Studies, Food and Nutrition, and Individual and Family Living. None of these courses are compulsory. In 2011, EQAO released updated curriculum connections (see EQAO, 2011f). To the list of courses being considered, EQAO added the Grade 9 Classical and International Languages course and the Exploring Technologies course. These courses should also be excluded. As presented in Phase 2 of this analysis, only five courses at the Grade 9 level can be included in a comparative analysis of the curriculum and the test. EQAO, in contrast, includes thirteen Grade 9 courses in their analysis. Although a curriculum expectation that relates to one of the reading or writing skills being evaluated through the literacy test might be found in one of the many courses EQAO considered, these expectations provide insufficient grounds upon which the testing practices can be justified. It is concerning that the curriculum analysis does not take into consideration the parameters of the measurement context. Moreover, “As part of its commitment to ensuring high-quality curriculum based assessment, EQAO has Ontario educators write all assessment items according to specific curriculum expectations” (EQAO, 2015a, p. 5). Which expectations are used and how the particular expectations are selected are not explained. It would be concerning if an expectation that is exclusive to a course that not all students are expected to complete by the end of Grade 9 was used as part of the test item development process.

The lack of process information. EQAO’s representation of the curriculum connections is missing the process information that facilitates and invites critical readings of analytical work. There is no narrative to explain EQAO’s methods. When reading EQAO’s mapping of the test and the curriculum, there is no distinction between which of the six reading and writing skills that EQAO claims to evaluate are connected with each of the selected curriculum expectations. Thus, it is difficult to conclude from EQAO’s analysis whether or not all of their six skills can be aligned with curriculum expectations. It is also not always clear why a particular expectation is identified as being related to either reading skills or writing skills. For example, from the 2010 interim version of the Grade 8 Health and Physical Education course, EQAO lists that students are expected to “recognize the difference between health-related components of personal fitness (i.e., cardio-respiratory endurance, muscular strength, muscular endurance, flexibility) and skill-related components (i.e., balance, agility, power, reaction time, speed, and coordination), and explain how to use training principles to enhance both components” (EQAO, 2011f, p. 8). This

expectation is indicated as being connected to both reading skills and writing skills. I am not sure how either reading or writing skills necessarily relates to this item explicitly though. Without any explicit reference to reading or writing, EQAO would need to justify the inclusion of this particular expectation within their chart. Providing an interpretation of the curriculum in this instance could help a reader understand how EQAO interprets the curriculum and how EQAO understands reading and writing to be conceptualized in the context of Ontario education.

Presentation of the Results for Part Three. The results of the full comparative mapping of the curriculum and the test constructs are presented in Appendix C. Each item in the curriculum construct has been coded in terms of whether the literacy-associated action is represented at least to some extent in the test construct (▲), whether an argument could be made that there is a potential relationship between a literacy action and the test construct (∴), or whether there is no evidence of construct representation in the test construct (--). An overview of the results of the mapping is presented in Table 8.

Table 8. *Overview of the Results of the Comparative Mapping of the Curriculum and the Test*

Literacy (General)			
--	• Using oral communication skills (Mathematics, p. 27)	▲	• Engaging with diverse texts (History, p. 48)
--	• Listening (English, p. 3), Speaking (French as a Second Language, p. 48), “[D]iscussing” (Arts, p. 51)	--	• Practicing movement (Health and Physical Education, p. 71)
▲	• Using written and visual communication skills (Mathematics, p. 27)	--	• Planning and conducting inquiries and investigations (Science, p. 40)
▲	• Writing (English, p. 3)	▲	• Asking questions (History, p. 49)
--	• Representing (Geography, p. 51)	▲	• “[L]ocat[ing]” information (English, p. 34)
--	• “[C]ommunicating with words and with the body” (Health and Physical Education, p. 70)	▲	• “[E]valuat[ing]” information (OMOE, 2008, <i>Reach Every Student</i> , p. 6, as cited in Geography, p. 50)
--	• Expressing oneself (French as a Second Language, p. 48) and one’s thoughts and feelings (Arts, p. 51)	--	• Using a variety of sources (Science, p. 40)
▲	• Communicating understanding (Arts, p. 51)	▲	• Recording observations (Mathematics, p. 27)
▲	• Developing and using “critical thinking skills” (Health and Physical Education, p. 70)	▲	• Presenting ideas/findings (Science, p. 39)
--	• Analyzing (Science, p. 39)	--	• Applying reasoning (Health and Physical Education, p. 71)
∴	• Thinking “creatively” (Health and Physical Education, p. 70)	∴	• Explaining reasoning; Justifying results (Mathematics, p. 27)
--	• Developing and selecting “appropriate methods” (Science, p. 40)	∴	• Exploring and determining solutions (Arts, p. 53)
--	• Evaluating the effectiveness of texts (English, p. 34)	∴	• Solving problems (Mathematics, p. 27)
--	• Developing identity (English, pp. 34)	• Reflecting (Arts, p. 52)	
--	• ‘Defining thoughts about oneself, others, and the world’ (French as a Second Language, p. 36)	--	• Offering critiques (Arts, p. 51)
▲	• Supporting opinions (English, p. 3)	▲	• “[C]onnecting learning to past experiences” (French as a Second Language, p. 48)
∴	• Understanding “language and its structure” (French as a Second Language, pp. 35-36)	--	• “[A]pply[ing] metacognitive knowledge and skills” (French as a Second Language, p. 48)
▲	• Using language with “precision” (Science, p. 40)	∴	• Using discipline-specific skills and understanding discipline-specific language (Science, pp. 39-40)
▲	• Focusing on purpose and audience (English, p. 3)	--	• Developing an understanding of concepts (Arts, p. 51)
▲	• Interpreting symbols (Arts, p. 52)	--	• Addressing “issues of fairness, equity, and social justice” (Arts, p. 51, Health and Physical Education, p. 70)
▲	• Reading (English, p. 3)		

Critical Literacy		Scientific Literacy	
--	• Analyzing sources (<i>investigating multiple perspectives</i>) (History, p. 37)	--	• Understanding “what scientists, engineers, and technologists do as individuals and as a community” (Science, p. 4)
--	• Understanding influence of a text on readers and intentions of creators (Geography, pp. 52-53, Health and Physical Education, pp. 72-73)	--	• Understanding “how scientific knowledge is generated” (Science, p. 4) and “the costs and benefits” of using scientific knowledge
∴	• “[D]etermining the intended audience” of a text (History, p. 37)	--	• Initiating and planning (Science, pp. 17, 19)
▲	• Interpreting (Science, p. 38)	--	• “[P]lanning investigations” (Science, p. 19) and selecting methods
∴	• “[S]ynthesiz[ing] information” (Geography, p. 3)	--	• “Identify[ing] problems/issues to explore” (Science, p. 20)
--	• Assessing texts (Science, p. 38)	--	• “Formulat[ing] questions” (Science, p. 20)
--	• Learning techniques used to create texts (e.g., media techniques, art techniques) (Arts, p. 41)	--	• “Mak[ing] predictions, develop[ing] hypotheses” (Science, p. 20)
--	• ‘Understanding self, other, and world’ (English, p. 5)	--	• “Identify[ing] and locat[ing] research sources” (Science, p. 20)
--	• “[B]ecom[ing] [a] reflective, critical, independent” learner (English, p. 5)	--	• Planning for safety (Science, p. 20)
--	• “[B]e[ing] aware of points of view” and context(s) (Geography, p. 53)	--	• Performing and recording (Science, pp. 17, 19)
∴	• “[I]dentify[ing] perspectives, values, [bias], and issues” (English, p. 34)	--	• Conducting research safely (Science, p. 19)
--	• “[F]ocusing on issues related to [. . .] social justice” (Arts, p. 53) and fairness (Health and Physical Education, p. 72)	--	• “[G]athering, organizing, and recording information” and observations (Science, pp. 19-20)
▲	• Communicating (French as a Second Language, p. 3)	--	• “[C]ontrol[ling] variables” (Science, p. 20)
--	• Using “drama conventions” to communicate multiple perspectives (Arts, p. 42)	--	• “Acknowledg[ing] sources” (Science, p. 20)
--	• “[A]sking questions” (English, p. 34)	▲	• Analyzing and interpreting (Science, pp. 17, 19)
--	• “[A]sking [. . .] who benefits from the text” (Health and Physical Education, p. 72)	--	• Identifying “patterns and relationships” (Science, p. 20)
		▲	• “Draw[ing] conclusions” (Science, p. 20)
		∴	• “Justify[ing] conclusions” (Science, p. 20)
		--	• Evaluating ‘relevance’ and “reliability of data” (Science, p. 20)
		--	• “Identify[ing] sources of error or bias” (Science, p. 20)
		▲	• Communicating (Science, pp. 17, 19)
		∴	• Communicating “ideas, procedures, and results” using a “variety of forms” (e.g., “linguistic, numeric, symbolic, and graphic modes”) (Science, p. 19)
		∴	• “Express[ing] results accurately and precisely” (Science, p. 20)
Information Literacy		Game Literacy	
--	• Creating texts (i.e., art works) (Arts, p. 56)	∴	• Using critical and creative thinking skills (Health and Physical Education, p. 32)
--	• “[D]esign[ing] [inquiry] questions” for discipline-specific inquiries (History, p. 53)	∴	• “[T]hinking strategically” (Health and Physical Education, p. 32)
▲	• “[L]ocat[ing]” information (English, p. 35)	--	• “[D]evising and apply[ing] strategies and tactics” (Health and Physical Education, p. 32)
--	• “[S]elect[ing]” information (English, p. 35)	--	• Understanding game structure and mechanics (Health and Physical Education, p. 32)
--	• “[G]ather[ing]” information (History, p. 52)	--	• Understanding how to group and categorize games (Health and Physical Education, p. 32)
∴	• “[P]rocess[ing]” information (Geography, p. 54)	--	• “[M]ak[ing] connections between different games and game components” (Health and Physical Education, p. 32)
--	• “[C]ritically evaluat[ing]” information (English, p. 35)	∴	• “[T]ransfer[ring] strategies, tactics, and skills from one game or activity to another in the same category” (Health and Physical Education, p. 32)
--	• Working with “digital, print, and visual resources for projects” (History, p. 53)	--	• Increasing one’s “ability to participate successfully in a wide range of games and other activities” (Health and Physical Education, p. 32)
▲	• “[C]ommunicat[ing] information” (English, p. 35)		
--	• Communicating “findings for different audiences, using a variety of formats [. . .]” (Geography, p. 54)		
--	• Using information to “explore and investigate issues” (Arts, p. 55)		
--	• Using information to “make decisions” (Health and Physical Education, p. 74)		
▲	• Using information to “create personal meaning” (English, p. 35)		

Physical Literacy		Health Literacy	
▲	• Developing and using language and communication skills (Health and Physical Education, p. 70)	▲	• Developing and using language and communication skills (Health and Physical Education, p. 70)
--	• Developing and using oral communication skills (Health and Physical Education, p. 70)	∴	• Developing and using “thinking skills” (Health and Physical Education, p. 70)
--	• Talking about “a range of topics in health and physical education” (Health and Physical Education, p. 71)	▲	• “[U]nderstand[ing]” information (Irving Rootman and Deborah Gordon-El-Bihbety, <i>A Vision for a Health Literate Canada</i> , 2008, as cited in Health and Physical Education, p. 7)
∴	• Developing and using “thinking skills” (Health and Physical Education, p. 70)	--	• ‘Understanding the connections’ between “active living, movement competence, healthy living, and living skills” (Health and Physical Education, p. 10)
--	• Developing “movement skills” (Health and Physical Education, p. 27)	--	• “[D]evelop[ing], maintain[ing], and enjoy[ing] healthy living” (Health and Physical Education, p. 34)
--	• Developing “movement competence” (Health and Physical Education, p. 27)	--	• “[S]et[ting] goals” (Health and Physical Education, p. 34)
▲	• “[E]xploring” and “understand[ing] ideas and concepts” (Health and Physical Education, p. 71)	∴	• “[S]olv[ing] problems” (Health and Physical Education, p. 34)
▲	• Analyzing (Physical and Health Education Canada, “What is Physical Literacy,” as cited in Health and Physical Education, p. 7)	--	• “[M]ak[ing] decisions” (Health and Physical Education, p. 34)
▲	• ‘Organizing personal experience and knowledge’ (Health and Physical Education, p. 71)		
∴	• “[I]dentify[ing] and solv[ing] problems” (Health and Physical Education, p. 71)		
--	• Participating in “physical activities” (Health and Physical Education, p. 27)		
--	• Applying motor skills and “movement concepts, strategies, and principles” (Health and Physical Education, p. 27)		
Media Literacy		Musical Literacy	
--	• Developing an understanding of media techniques (English, p. 115)	--	• Understanding and using “the variety of ways in which meaning is communicating through music” (Arts, p. 179)
--	• Recognizing media text forms and conventions (English, p. 115)	--	• Using the reading, writing, and aural skills relevant to music education (Arts, p. 179)
--	• Recognizing beliefs, values, and special interests in media texts (English, p. 115)	--	• Using “notation, symbols, and terminology” (Arts, p. 179)
--	• Recognizing multiple interpretations of texts (English, p. 115)	--	• “[S]inging, playing, moving, performing, creating, and listening” (Arts, p. 16)
		--	• Responding to music and musical experiences (Arts, p. 16)
Spatial Literacy		French or FSL Literacy	
▲	• Developing and using spatial skills (e.g., “map, globe, and graphing skills”) (Geography, p. 28)	--	• Developing and using oral communication skills (French as a Second Language, p. 48)
▲	• Analyzing diverse graphic texts (History, p. 24)	--	• “[D]eveloping strategies” (French as a Second Language, p. 48)
▲	• “[M]aking meaning of maps and graphs” (History, p. 24)	▲	• “[U]nderstand[ing]” texts (French as a Second Language, p. 48)
▲	• “[G]athering data or information” (History, p. 24) from digital and/or visual texts (e.g., “online atlases or interactive maps” (p. 24))	--	• Talking about texts (French as a Second Language, p. 48)
--	• “[C]onstruct[ing]” diverse “graphic texts” (History, p. 24)	▲	• Writing about texts (French as a Second Language, p. 48)
		▲	• “[P]resent[ing] [. . .] ideas” (French as a Second Language, p. 48)
Financial Literacy		Mathematical Literacy	
--	• “[I]nvestigat[ing] the impact of economic factors” (History, p. 47) and exploring community responses	--	• “[U]sing diagrams, tables, graphs, calculations, and equations to represent quantitative data” (Science, p. 40)
--	• Analyzing financial risks (Health and Physical Education, p. 69)	▲	• Reading graphs (History, p. 49)
--	• Considering consumer choices in relation to “health and well-being” (Health and Physical Education, p. 69)	▲	• Interpreting maps (Geography, p. 51)
		--	• “[T]racking changes” in health and fitness (Health and Physical Education, p. 74)

Arts/Artistic Literacy		Visual Literacy	
--	• “[U]nderstanding what artists, musicians, actors, and dancers do as individuals and as a community” (Arts, p. 4)	--	• “[I]nvestigat[ing] and understand[ing] [. . .] media [. . .] and art works” (Arts, p. 17)
--	• “[U]nderstanding [. . .] how ideas are generated in the various arts” (p. 4) and the benefits associated with the arts	--	• “[D]eveloping the ability to respond to [. . .] and analy[z]e works of art” (Arts, p. 17)
--	• Expressing oneself artistically (Arts, p. 4)	--	• Learning to communicate understanding (Arts, p. 17)
--	• “[R]estructuring personal ideas and experiences” (Arts, p. 4)	--	• Expressing oneself “in visual ways” (Arts, p. 17)
--	• “[P]erceiving” and interpreting the “world through exploration and experimentation” (Arts, p. 4)	▲	• Engaging with “a broad range of forms, genres, and styles” (Arts, p. 17)
		--	• (e.g., “traditional arts of drawing, painting, sculpting, printmaking, architecture, and photography, as well as commercial art, traditional and fine crafts, industrial design, performance art, and electronic and media arts” (Arts, p. 17))
Multiple Literacies		Linguistic Literacy	
--	• Learning “about different art forms” (Arts, p. 54)	--	• Using “different means of expression” (Arts, p. 55)
▲	• “[I]nterpret[ing]” and communicating meaning (Arts, p. 54)	--	• Developing an understanding of artistic languages (Arts, p. 55)
--	• Using ‘visual, oral, gestural modes of expression’ (Arts, p. 54)		
--	• Preparing “to adapt to change” (Arts, p. 55)		
Environmental Literacy		Historical Literacy	
--	• Questioning and examining human impact on the environment (Science, p. 36)	--	• Analyzing (<i>i.e., investigating multiple perspectives using</i>) “evidence from primary and secondary sources” (History, p. 7)
Technological Literacy		Food Literacy	
--	• Critically evaluating information (Science, p. 3)	X	• <i>Not Represented</i>

Note. All language used to develop the expected literacy construct, as well as this overview, is derived from the Ontario curriculum. The following curriculum documents are reflected in the expected literacy construct: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); and Science (OMOE, 2008). ‘▲’ = Represented in the test construct to some extent; ‘.:’ = Potential relationship with the test construct; ‘--’ = Not represented in the test construct.

The “therefore” (.:) symbol is being used to indicate when a potential, yet undefined, relationship may exist between the constructs. Items that have been coded in this way are considered to not be represented explicitly enough in the test’s design. An argument could potentially be made that these items relate, although not explicitly, to the literacy construct of the OSSLT and that test results are based on an implicit, yet unstated, evaluation of the engagements with literacy that fall within this coding category though. This code highlights a possibility that some actions are necessary for test takers to be able to successfully complete particular test items. If this is the case, these connections need to be made explicit, and these aspects of what literacy performances entail should be reflected in the test construct and be articulated as part of what the test is measuring. Thus, identifying where there is a potential relationship is significant because these possibilities illustrate how the test’s construct and the how the scoring or evaluation tools could potentially be expanded to better represent particular aspects of the

curriculum's construct. Table 9 presents a few examples of potential relationships with brief explanations for the literacy-associated actions where there is ambiguity about potential relatedness with the test construct.

Table 9. *Potential Relationships Between the Expected Curriculum and the OSSLT*

Literacy-Associated Action	Explanation
Understanding “language and its structure” (French as a Second Language, pp. 35-36)	Although an understanding of “language and its structure” (French as a Second Language, pp. 35-36) is arguably part of what it means to be able to have control over conventions, the OSSLT only focuses on students’ demonstration of their knowledge of conventions, and there is no explicit awareness of language structures necessarily being required. Students are expected to write in orthographically correct ways, but they do not have to demonstrate any understanding of these conventions other than being able to write in a specific way and/or apply particular rules of how to use conventions as they write. Students are not required to demonstrate that they have a conscious understanding of the rules, how they work, how they were determined, or what potential purposes conventions serve.
Using discipline-specific skills (Science, p. 39)	It is possible to consider how students might use discipline-specific skills when engaging with the OSSLT test items, especially considering how the curriculum presents the many types of literacy through disciplinary lenses. When reading the graphic text on the OSSLT, for instance, EQAO recognizes that students might be reading maps or tables, but EQAO does not recognize these particular skills as being related to a particular discipline. EQAO does not appear to conceptualize any reading and writing skills as being discipline-specific in their evaluation of students’ literacy skills. In their curriculum connections analysis (EQAO, 2008a, 2011f), EQAO demonstrates that the particular reading and writing skills that are evaluated through the OSSLT are skills that can be located across multiple disciplines.
Thinking “creatively” (Health and Physical Education, p. 70); Solving problems (Health and Physical Education, p. 70)	These two literacy-associated actions could potentially be related to the section of the OSSLT where students are required to write a news report. For the news report, students are provided with a headline and a photograph, and they are required to “find a link” (EQAO, 2015l, p. 15) between these two items and come up with an event that has taken place that they could report on. Although students might have to think creatively to come up with an event with enough detail to write a news report, creativity is not mentioned anywhere by EQAO, nor is it explicitly being evaluated. This task also arguably requires a student to solve the problem being presented, should the task be conceptualized as a problem to be solved (i.e., come up with the missing report that accompanies the headline and photograph, or complete the task of writing an article with only the two provided pieces of information). There is no indication that problem-solving skills are being evaluated though.

Note. All sources for curriculum documents: French as a Second Language (OMOE, 2014b); Health and Physical Education (OMOE, 2015b); and Science (OMOE, 2008).

Table 10 presents a summary of the test’s construct representation organized by coding results. This alternative representation offers a summary of the results presented in the overview. All of the instances that have been coded as being represented in the test construct are grouped together, all of the instances that have been coded as not being represented in the test construct

have been grouped together, and all of the instances that have been identified as having a potential relationship with the test construct have been grouped together. This summary further clarifies what is potentially measured, and it highlights all that is not measured through the test.

Table 10. *Summary of the Test's Construct Representation*

Represented in the Test Construct (▲) (i.e., Potentially Measured Through the Test)	
• “[C]ommunicat[ing] information” (English, p. 35) and understandings (Arts, 51) • Developing and using language (Health and Physical Education, p. 70), communication (written and visual) (Mathematics, p. 27), and spatial skills (Geography, p. 28) • Using language with “precision” (Science, p. 40) • Writing about texts (French as a Second Language, p. 48) • Presenting ideas (Science, p. 39), expressing oneself (French as a Second Language, p. 48), supporting opinions (English, p. 3) • Focusing on purpose and audience (English, p. 3) • Reading (English, p. 3), analyzing, and interpreting texts (including symbols, maps, and graphs) (Arts, p. 52, Geography, p. 51, History, p. 24)	• Locating (English, p. 34) and exploring (Health and Physical Education, p. 71) ideas, and gathering information from digital or visual texts (History, p. 24) • Understanding ideas, information, and texts (French as a Second Language, p. 48, Health and Physical Education, p. 71) • Engaging with diverse texts (History, p. 48), including diverse forms, genres, and styles (Arts, 17) • ‘Organizing personal experience and knowledge’ (Health and Physical Education, p. 71); “[C]onnecting learning to past experiences” (French as a Second Language, p. 48) • Applying reasoning (Health and Physical Education, p. 71) • “Draw[ing] conclusions” (Science, p. 20)
Not Represented in the Test Construct (--) (i.e., Not Measured Through the Test)	
• Developing and using “critical thinking skills” and communication (oral and physical) skills (Health and Physical Education, p. 70) • Using the reading, writing, and aural skills relevant to music education (Arts, p. 179) • Developing movement skills and “movement competence” (Health and Physical Education, p. 27) • Learning “about different art forms” (Arts, p. 54); Developing an understanding of artistic languages (Arts, p. 55); “[D]eveloping the ability to respond to [. . .] and analy[z]e works of art” (Arts, p. 17) • Learning to communicate understanding (Arts, p. 17) • Responding in response to music and musical experiences (Arts, p. 16) • “[D]evising and apply[ing] strategies and tactics” (Health and Physical Education, p. 32) • Understanding game structure and mechanics (Health and Physical Education, p. 32) • Understanding how to group and categorize games (Health and Physical Education, p. 32) • “[M]ak[ing] connections between different games and game components” (Health and Physical Education, p. 32) • Increasing one’s “ability to participate successfully in a wide range of games and other activities” (Health and Physical Education, p. 32) • Learning techniques used to create texts (e.g., media techniques, art techniques) (Arts, p. 41) • Creating texts (i.e., art works) (Arts, p. 56); “[C]onstruct[ing] diverse “graphic texts” (History, p. 24); Using “notation, symbols, and terminology” (Arts, p. 179) • Using “different means of expression” (Arts, p. 55); Expressing oneself artistically and “in visual ways” (Arts, p. 17); “[S]inging, playing, moving, performing, creating, and listening” (Arts, p. 16) • Participating in “physical activities” (Health and Physical Education, p. 27)	• Recognizing beliefs, values, and special interests in media texts (English, p. 115); Recognizing multiple interpretations of texts (English, p. 115); “[B]e[ing] aware of points of view” and context(s) (Geography, p. 53) • Understanding influence of a text on readers and intentions of creators (Geography, pp. 52-53, Health and Physical Education, pp. 72-73) • Talking about “a range of topics in health and physical education” (Health and Physical Education, p. 71) • Considering consumer choices in relation to “health and well-being” (Health and Physical Education, p. 69) • Planning and conducting inquiries and investigations • Formulating and asking questions (English, p. 34, Health and Physical Education, p. 72, History, p. 49, Science, p. 40) • Identifying problems (e.g., Investigating economic impacts and community responses; Questioning and examining human impact on the environment) (History, p. 47, Science, p. 20, 36) • Perceiving and interpreting the “world through exploration and experimentation” (Arts, p. 4) • “Mak[ing] predictions, develop[ing] hypotheses” (Science, p. 20) • Developing and selecting “appropriate methods” (Science, p. 40); Planning for safety (Science, p. 20); Conducting research safely (Science, p. 19) • Identifying, locating, acknowledging, and evaluating research sources (Science, p. 20); Working with “digital, print, and visual resources for projects” (History, p. 53); Analyzing “evidence from primary and secondary sources” (History, p. 7) • “[G]athering, organizing, and recording information” and observations (Science, pp. 19-20); “[C]ontrol[ling] variables” (Science, p. 20) • Using information to “explore and investigate issues” (Arts, p. 55), and to “make decisions” (English, p. 74); Identifying “patterns and relationships” (Science, p. 20)

Not Represented in the Test Construct (--) (i.e., Not Measured Through the Test)	
• Applying motor skills and “movement concepts, strategies, and principles” (Health and Physical Education, p. 27) • “Understanding the connections” between “active living, movement competence, healthy living, and living skills” (Health and Physical Education, p. 10) • “[D]evelop[ing], maintain[ing], and enjoy[ing] healthy living” (Health and Physical Education, p. 34) • Understanding “how scientific knowledge is generated” (Science, p. 4), by whom, and “the costs and benefits” of using scientific knowledge; “[U]nderstanding [. . .] how ideas are generated in the various arts” (p. 4) and the benefits associated with the arts • Talking about texts (French as a Second Language, p. 48); Analyzing sources (History, p. 37); Assessing texts (Science, p. 38); Analyzing financial risks (Health and Physical Education, p. 69); Critically evaluating information (Science, p. 3); Evaluating the effectiveness of texts (English, p. 34) • Understanding and using “the variety of ways in which meaning is communicating through music” (Arts, p. 179) • “[I]nvestigat[ing] and understand[ing] [. . .] media [. . .] and art works” (Arts, p. 17) • Recognizing media text forms and conventions (English, p. 115)	• Evaluating “relevance” and “reliability of data” (Science, p. 20); “Identify[ing] sources of error or bias” (p. 20) • Explaining reasoning; Justifying results (Mathematics, p. 27) • Representing (Geography, p. 51); Communicating “findings for different audiences, using a variety of formats [. . .]” (Geography, p. 54) • “[R]estructuring personal ideas and experiences” (Arts, p. 4) • Developing conceptual understandings (Arts, p. 51) • Offering critiques (Arts, p. 51) • “[B]ecom[ing] [a] reflective, critical, independent” learner (English, p. 5); Reflecting (Arts, p. 52); Using “metacognitive knowledge and skills (French as a Second Language, p. 48) • Addressing “issues of fairness, equity, and social justice” (Arts, p. 51, Health, p. 70) • Developing identity (English, p. 34); “Defining thoughts about oneself, others, and the world” (French as a Second Language, p. 36) • “[S]et[ting] goals” (Health and Physical Education, p. 34) • “[M]ak[ing] decisions” (Health and Physical Education, p. 34) • Preparing “to adapt to change” (Arts, p. 55)
Potential Relationships (:) (i.e., Not Explicitly Represented or Measured)	
• Developing and using “thinking skills” (Health and Physical Education, p. 70) • Using creative thinking skills; Thinking “creatively” (Health and Physical Education, p. 70) • “[T]hinking strategically” (Health and Physical Education, p. 32) • “[T]ransfer[ring] strategies, tactics, and skills from one game or activity to another in the same category” (Health and Physical Education, p. 32) • Using discipline-specific skills and understanding discipline-specific language (Science, pp. 39-40) • Understanding “language and its structure” (French as a Second Language, pp. 35-36)	• “[D]etermining the intended audience” of a text (History, p. 37) • “Identify[ing] sources of error or bias” (Science, p. 20) • Communicating “ideas, procedures, and results” using a “variety of forms” (e.g., “linguistic, numeric, symbolic, and graphic modes”) (Science, p. 19) • “Express[ing] results accurately and precisely” (Science, p. 20) • “[P]rocess[ing]” information (Geography, p. 54) • “[S]ynthesiz[ing] information” (Geography, p. 3) • Exploring and determining solutions (Arts, 53); Solving problems (Mathematics, p. 27) • “Justify[ing] conclusions” (Science, p. 20)

Note. Sources for the curriculum documents referenced: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); and Science (OMOE, 2008).

Although quantification is not the goal of this inquiry, when working with complex representations of the results of comparative mappings, it can be helpful to be able to construct an understanding of how many items listed in the curriculum’s construct are and are not represented in the test construct. Table 11 presents a comparison of the number of items listed in the curriculum’s construct that are represented, that are not represented, and that have only a potential relationship with the test’s construct. While quantifying the extent of the construct representation is not the focus of this inquiry, it is helpful to be able to observe that there are many items in the curriculum construct that are not represented in the test construct. The large majority of items included within the expected literacy construct are not being measured through

the literacy test. The interpretivist focus of this research prioritizes making sense of the items in the curriculum construct that are and are not represented. What is most productive when working with the diverse mappings is considering which particular items are coded as being represented or not. Each individual item in a construct needs to be critically considered and positioned in relation to the other items in the construct.

Table 11. *Comparative Quantification of Construct Representation*

	Full (See Appendix C)	Overview (See Table 8)	Summary (See Table 10)
Total Items	241	168	75
Represented (▲)	51 (21%)	41 (24%)	13 (17%)
Not Represented (--)	165 (68%)	109 (65%)	48 (64%)
Potential Relationships (∴)	25 (10%)	18 (11%)	14 (19%)

Note. Percentages are rounded to the nearest whole number. For this reason, the total percentage of reported representation for the full mapping amounts to 99% rather than 100%.

In both the overview and the summary of the overview, repetitions and overlapping expectations in the curriculum construct have been consolidated. Thus, although the number of total items listed in each of the representations of the results differs, all of the items are accounted for in each representation of the results of the comparative mapping. None of the representations are any more accurate or correct than any of the others. The difference between the representations is in how the narratives of the curriculum documents and the test documents have been interpreted and how, in particular, the literacy-associated actions in the construct have been grouped due to perceived similarities in the wordings, expressions, and/or examples used to characterize what is expected of students. Since some facets of the construct are differently grouped in the overview and again in the summary, in contrast to how they are itemized in the full mapping, this can potentially lead to different overall impressions of construct representation though. It is, nevertheless, clear across all three representations that a significant amount of the curriculum's construct is not represented in the test's construct.

All three representations of the results are presented in this section to highlight the significance of representational choices when presenting the results of construct analysis as part of validity research. The representational and performative choices made when presenting validity research need to be critically assessed and the representations discussed. The constructs and comparative mappings, as well as the different representations of these mappings, presented

throughout this chapter were not constructed with the intention of being indicative of quantities. There are instances of repetition that would need to be addressed should any impression of quantities be considered. A detailed analysis of the differences in representation that appear in the overview in contrast to the full mapping are outlined in Appendix E. Appendix E focuses in particular on how well each of the specific types of literacy, as well as a general concept of literacy, that are introduced throughout the curriculum are represented in the test construct.

To complement and to further enhance this analysis, it is helpful to understand how these mapping results can be positioned in relation to the proposed theoretical critical literacies construct as well. Expanding the comparative mapping in this way makes it possible to understand not only how the test relates to the curriculum but also how the test relates to the broader domain that it is supposedly able to representatively report on. The items that are represented in the test's construct reflect either "Analyzing Texts" and/or "Critically Responding" in terms of the proposed critical literacies construct. In a few cases, items would also be double-coded as being instances of "Acting and Reflecting." As explained when presenting the proposed theoretical construct, any instance of questioning, analyzing texts, or critically responding could arguably also be conceptualized as an instance of acting. Moreover, any form of engagement entails reflecting, at least to some extent, when engagement is conceptualized through a critical literacies lens. For example, one set of similar items that is listed in the summary that would be double coded is the following: 'Organizing personal experience and knowledge' (OMOE, 2015b, Health and Physical Education, p. 71); "[C]onnecting learning to past experiences" (OMOE, 2014b, French as a Second Language, p. 48). This item could relate to processes of analyzing texts, where experiences are texts to be critically considered and where making connections between multiple texts and experiences is considered to be an analytical experience. Organizing and connecting personal experiences is a form of literacy engagement that also requires reflection. No items that are represented in the test construct clearly relate to "Questioning" though. Questioning is not something that is clearly measured in the testing construct; however, engaging in questioning can manifest itself in many different ways, and it is an important part of processing the deconstruction and reconstruction of texts. The majority of items in the curriculum construct, as well as in the test construct, relate to "Analyzing Texts" and "Critically Responding," and there are not many items that explicitly relate to "Questioning" and "Acting and Reflecting." While these aspects of the proposed

construct are addressed at least to some extent in the curriculum construct, that these aspects of the construct are not sufficiently addressed, or underrepresented, in the measurement context is concerning. Formulating and asking questions (OMOE, 2007, English, p. 34; OMOE, 2015b, Health and Physical Education, p. 72; OMOE, 2013a, History, p. 49; OMOE, 2008, Science, p. 40) is included in the curriculum's construct sample, but this expected literacy-associated action is not reflected in the test's construct sample. Developing identity (OMOE, 2007, p. 34), 'Defining thoughts about oneself, others, and the world' (OMOE, 2014b, French as a Second Language, p. 36), and "[S]etting goals" (OMOE, 2015b, Health and Physical Education, p. 34) all relate to acting and reflecting and are part of the curriculum's construct sample, but these expected literacy-associated actions are also not reflected in the test's construct sample.

That items in the expected literacy construct would need to be double coded further emphasizes how engaging with literacies is an ongoing and cyclical process in which multiple skills are used in concert with one another. Attempting to isolate skills for measurement is, at the very least, limited, if not flawed, in what the data could suggest about an individual's literacy proficiency.

Discussion of the Results for Part Three. I have focused the construct analysis around issues of representation, since construct underrepresentation has been identified as one of the greatest threats to validity (see Messick, 1989, p. 7). When something is omitted or excluded from a test construct, it is important to consider why that might be and whether or not the exclusion can be justified and accepted.

In the sections that follow, I discuss the results of the comparative mapping in terms of: (a) the extent of the alignment between the curriculum and the test, (b) the disciplinarity of literacies, (c) the curriculum's unmatched high expectations, (d) the literacy process versus the product, (e) the hierarchy of literacy skills, (f) trends in underrepresentation, and (g) critical literacies. I have organized the discussion to first focus on elements of the construct for which there is some evidence of alignment before then discussing the underrepresented aspects.

The extent of alignment. Discrepancies exist between what is expected of students and how achievement is evaluated through the test. For example, interpreting what the literacy-associated action of communicating is expected to entail requires understanding how this action is presented in the curriculum. A curriculum expectation from the Science curriculum (OMOE, 2008) is listed to warrant inclusion of this action in the curriculum construct. The expectation states that, by the

end of the Grade 9 Science courses, all students are expected to be able to “communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g., data tables, laboratory reports, presentations, debates, simulations, models)” (OMOE, 2008, pp. 49, 61). For the OSSLT, in contrast, the concept of communicating is only conceptualized in the context of writing skills. Communicating through writing is demonstrated and evaluated through short written responses, writing a news report, and writing an opinion piece. The OSSLT’s test items do not seem to provide sufficient grounds upon which an evaluator could comment on whether or not a student would be able to communicate through the diverse modes and mediums that are expected of Ontario students. There is only partial alignment between the test and the curriculum.

The disciplinarity of literacies. Although the test’s literacy construct is mapped across the full expected literacy construct, and in relation to the many different types of literacy that are presented across the curriculum, EQAO does not refer to different types of literacy whether it be, for instance, critical literacy, physical literacy, or arts/artistic literacy. For the test, literacy is only conceptualized as reading and writing. There does not seem to be any indication that particular disciplines contribute anything unique to an understanding of literacy, and it is not clear how the cross-curricular or cross-disciplinary aspect of literacy is significant in the context of the test. Disciplinary differences are noted in the Science program though when the OMOE states, “When reading in science, students use a different set of skills than they do when reading fiction or general non-fiction” (OMOE, 2008, p. 39). The Science program notes that literacy includes engaging with specialized language and particular text types, including “symbols, charts, diagrams, and graphs” (OMOE, 2008, p. 39). The focus of the literacy test is always on the same few particular skills, and the test’s evaluation criteria are consistent across the test items, regardless which disciplinary context(s) might be incorporated within a test item.

The curriculum’s unmatched high expectations. The Ontario curriculum sets high expectations for what students are expected to be able to demonstrate by the end of Grade 9. The literacy-associated actions presented in the comparative mapping are aligned with demanding expectations for how these literacy actions can manifest themselves in practical experiences. Students are expected to engage in complex processes. Stating an idea that is either explicitly or implicitly stated in a text and supporting the idea with evidence from that same text on the test does not adequately compare to what is expected of students in the curriculum. All students are

also expected to be able to demonstrate the same literacy skills included in the expected construct, but they are not necessarily all expected to be able to do so in the same ways. There are a myriad of possible ways in which students can communicate and/or demonstrate their literacy skills. It is possible the simplicity of a task on a standardized test, and the elimination of choice and flexibility, could impede a student from being able to find a productive space and an opportunity to demonstrate their skills and achievements. An assumption that a student who cannot effectively demonstrate one iteration of a literacy action will not be able to demonstrate any other iterations that may be more complex would need to be extensively supported.

The literacy process versus the product. It is possible that some of the differences between how literacy skills are conceptualized in the curriculum in contrast to the test are present because the curriculum privileges processes whereas the test evaluates products. Because of EQAO's focus on the product, it is unclear what processes students might engage in and which skills in particular they might be using when they demonstrate their skills on the test. While composing diverse texts is valued by EQAO, it is unclear the extent to which students understand how to compose different texts for different purposes. It is possible students are simply able to replicate a particular form of written text that they have come to understand must have particular features to be well received. Students know in advance of writing the literacy test that a particular form of a news report, for instance, will be required. There are also numerous suggestions provided in the preparation guides that indicate what is expected and what will be valued in the evaluation. For the news report, for instance, it is recommended that students write about an event that has already taken place "in order to inform readers about the event" (EQAO, 2016e, p. 15). Students are also informed: "A news report usually answers the questions who, what, where, when, why and how" (p. 15). These items are not listed as criteria in the rubrics; however, there is a specific format and organization that appears to be valued. Students are advised: "Pretend you are writing for a newspaper, not for a radio or television station" (p. 5). They are told to write their "report using the third person" (p. 5). Students are filling in a structured template. The question is simply how well can students match the predetermined finished product. Other than needing to be relevant to the headline and picture, the content that students choose to share is not significant.

The hierarchy of literacy skills. Reading and writing skills have no more of a privileged position than the other literacy skills presented across the curriculum. It remains unclear why the literacy graduation requirement focuses exclusively on reading and writing skills. EQAO claims

that the OSSLT “has been designed to ensure that students who graduate from Ontario high schools have achieved the minimum reading and writing skills defined in *The Ontario Curriculum* by the end of Grade 9” (EQAO, 2015f, p. 82); however, what qualifies the particular reading and writing skills being measured to be the minimum, and why particular skills are prioritized as more essential than others for literacy, is unclear. The recently revised Kindergarten program (OMOE, 2016a) is evidence that there is no hierarchy of skills or any baseline that must first be established prior to being able to engage using literacies. One of EQAO’s arguments seems to be that the reading and writing skills being evaluated “are the basis for learning in all subject areas throughout both elementary and secondary school” (EQAO, 2016a, p. 8); however, this understanding does not resonate through the curriculum. Literacy appears to be related to learning, but there is no specific isolation of reading and writing skills as being most significant. The French as a Second Language program (OMOE, 2014b) actually emphasizes the importance of oral communication skills for all literacy learning. The OMOE (2014b) states, “To develop literacy in any language, it is critical for students to develop oral language skills” (p. 35). According to the OMOE (2014b), “[b]oth teacher talk and student talk are essential to the development of all literacy skills. Talk is a means of constructing meaning. It is used to develop, clarify, and extend thinking” (p. 36). Writing about integrated literacy education, Rose (2011) also notes that “literacy is hardly an isolated activity” (p. 82) and that talk is often part of learning “how language works” (p. 81). The test’s construct does not mirror the skills that are prioritized or most valued in the curriculum. In the curriculum, there are sections on critical literacy, financial literacy, mathematical literacy and numeracy, and so on. There are no sections that refer to reading and writing as being particularly significant.

Trends in underrepresentation. Many of the literacy-associated actions that are not represented in OSSLT’s construct are those that require (a) a form of collaborative engagement (i.e., speaking or asking questions); (b) physical forms of communication; or (c) the consultation of multiple resources. EQAO also does not appear to privilege (d) research processes, (e) reflective processes, or (f) critical thinking in the evaluation of students’ literacy skills. Language related to these actions does not appear in any of EQAO’s documentation about what reading and writing skills constitute in the context of the literacy test. The literacy test also focuses on students’ demonstrations of their achievement rather than on (g) the development of skills.

Critical literacies. The critical literacy section is one part of the comparative mapping that is particularly concerning. The two items in the expected literacy construct that relate to the test construct are interpreting (OMOE, 2008, p. 38) and communicating (OMOE, 2014b, p. 3). An argument could potentially be made that identifying perspectives, biases, and values are also part of the evaluative process of the OSSLT; however, there is no expectation that students need to engage with and recognize that the “ideas and information” they provide “from the reading selection” (EQAO, 2015i, Scoring Guide for Reading Open Response: Section I and V; see also EQAO, 2014f, Scoring Guide for Reading Open Response: Section IV, Q6 and 7) are reflective of perspectives, values, and biases (OMOE, 2007, p. 34). Students are also required to “synthesize information” (OMOE, 2013b, p. 3) they are reading to be able to provide responses to the questions on the test; however, EQAO does not provide an “interpretation argument” (Kane, 2013a, 2013b) to explain how this inference and assumption could be made when scoring students’ responses. There is no defined relationship between this skill and the test’s construct. The OSSLT’s evaluation criteria do not value what it means to reflect as a literacy learner (OMOE, 2007, p. 5), to examine the techniques used to create texts (OMOE, 2009, p. 41), to ask questions about texts (OMOE, 2007, p. 34, 2008, pp. 20, 36, 2013a, pp. 49, 53), to consider how a reader might be influenced by a text (OMOE, 2013b, pp. 52-53, 2015b, pp. 72-73), to investigate context and points of view (OMOE, 2013b, p. 53), to analyze sources or to consider multiple perspectives (OMOE, 2013a, p. 37), or to assess texts (OMOE, 2008, p. 38). These facets of the expected literacy construct, which illustrate conceptualizations of critical literacy presented in the curriculum, are not sufficiently represented in the test’s construct.

Reflecting on Construct Analysis

This chapter demonstrates how extensive construct analysis can be conducted to better understand how a test’s construct relates to the relevant curriculum construct, and also to the broader domain to which it corresponds. As a reflection on the construct analysis processes presented in this chapter, in the sections that follow, I consider (a) the challenges of pinning down a construct, (b) the challenges of working with an ever-changing construct, and (c) the challenges of assessing literacies.

Pinning Down a Construct. Part of the challenge with conducting construct analysis is pinning down a construct. Validity research, as discussed in Chapter 3, must be based on a thorough investigation of a test construct and the broader educational construct from which the

test's construct sample is derived. It is challenging to work with a theory, such as literacy, that is complex and multifaceted. As Christenbury, Bomer, and Smagorinsky (2009) state, "In today's world, literacy comprises so many competencies that even getting a grip on the construct can be a slippery process" (p. 5). In presenting construct analysis for this study, I sought to make it clear that all constructs are constructions and interpretive readings of some broader theorization and body of knowledge. In this sense, all constructs, including any proposed theoretical constructs, must be considered to be construct samples and limited in what they are able to capture and reflect at any given time. If constructs are expected to be able to capture the totality of any body of knowledge, they will always be deemed flawed and limited to at least some extent, since a multiplicity of perspectives is challenging to comprehensively capture critically. In the design of any construct, there are many representational and interpretive decisions being made, and there are also many decisions made about what to include and exclude from the particular construct. As theories continue to develop, constructs need to continue changing. There is always a need for ongoing validity research to inquire how effectively a test might continue to meet current objectives and needs, and part of this process is a continuous revision and reconstruction of the constructs that are intended to reflect the broader contexts in which a test or assessment is situated. Given that the literacy curriculum in Ontario is still undergoing revisions and development, it is not surprising that the literacy test is based upon a weak literacy construct. Although there is a general concept of literacy presented in each of the curriculum documents being reviewed, this general concept of literacy is inconsistently presented across the curriculum, and the many specialized types of literacy that are introduced are not acknowledged in any cohesive or unified manner. The quality of the testing program can only ever be as good as the quality of the education system upon which it is based.

An Ever-Changing Construct. There is no indication of how the OSSLT's test construct is responding to the changing curricular constructs of literacy. The same three reading skills and the same three writing skills continue to be evaluated. All of the curriculum documents included in this analysis have been published between 2005 and 2015, which is after the design of the OSSLT's test construct. The most recently released versions of the Ontario curriculum documents are included within this construct analysis to situate how the OSSLT's test construct, which remains unchanged year after year, currently relates to the Ontario curriculum. Over the years, the literacy construct of the OSSLT has arguably increasingly diminished in relevance to

the Ontario education context as the literacy construct for Ontario education has continued to change. The analysis presented in this chapter demonstrates how the OSSLT's literacy construct needs to be revised to better reflect the context in which students are experiencing literacy education in Ontario. If students are expected to be held accountable for their education, they should be held accountable for the education that they are expected to be receiving as reflected in the curriculum. When EQAO revises their test construct, it will become necessary to also review the measurement practices to ensure they remain appropriate for the literacies being measured.

The curriculum review cycle means that multiple cohorts of students are differently experiencing literacy education in Ontario. The literacy test needs to remain current with the revisions to the curriculum while being mindful of which educational programs students have experienced and what is expected of the particular students writing the test in a given year. Each year, there are Grade 10 students writing the literacy test for the first time, but there are also Grade 11 and 12 students writing and/or rewriting the test. It is important to consider how the curriculum, as it continues to be revised, relates to the educational experiences of particular (cohorts of) students. For two of the programs included in the construct analysis presented in this chapter, no student has taken courses from these programs and written the literacy test yet. The revised Health and Physical Education program cannot be fully incorporated into an OSSLT test construct until the 2018 administration of the test, given that the course in question is a Grade 8 course, and it was first implemented in the Fall of 2015 (OMOE, 2015b, p. 3). The first students to experience this course will not be writing the literacy test until they are in Grade 10 in the 2017-2018 school year, which would correspond with the 2018 version of the OSSLT. However, in 2018, there are students who will be (re)writing the literacy test who are in Grades 11 and 12, and those students will not have experienced the revised Health and Physical Education program. The French as a Second Language (FSL) curriculum raises similar construct issues.

Assessing Literacies. The proposed theoretical critical literacies construct does not define what constitutes instances of effective literacy engagement. There is no absolute of what counts as literacy, nor is there a determination of what warranting a literate, or sufficiently literate, identity looks like. When individuals reflect on engagements metacognitively, or self-assess their own literacy choices, these assessments and reflections are based on socially determined norms, expectations, standards, and values. Any judgement of an individual's engagements with literacies is value-based according to whatever criteria might be established and used to

determine what will be accepted as sufficient or satisfactory. Any judgement that threatens the identity of an individual as a sufficiently or successfully literate being would need to be justified. In this sense, positioning the individual as an already literate being raises a number of challenges for literacy evaluations. Moreover, with such a complex critical literacies construct, and so many possible ways of engaging and making meaning, it becomes challenging to use a narrow sample of the construct as a reflection that can potentially threaten a defined literate identity. The expectations and specific literacies being most highly valued and measured as part of a construct sample would need to be justified in relation to the more broadly defined construct. Any assessment or evaluation of an individual's ability to engage in these processes will always be selective and limited. The construct analysis presented in this chapter shows how challenging it is to be able to adequately and persuasively justify the use of a particular and limited construct sample. It also shows the complex analytical work that is required to assess the representativeness of a construct sample to be able to make a judgement and claim concerning the validity of using a testing program as a measurement tool for any stated purposes.

Positioning a Study of the Outcomes of Testing

Research is needed to better understand the outcomes or potential consequences of using a high-stakes test that is based on a limited construct for accountability purposes. According to the *Standards* (AERA et al., 2014), "A finding of unintended consequences may [. . .] lead to reconsideration of the appropriateness of the construct in question" (p. 31). The chapters that follow present an inquiry into the outcomes and the potential consequences of using a high-stakes test focusing on critical literacies. The outcomes analysis focuses on understandings and experiences of critical literacies in particular, since critical literacy is shown to be valued in the curriculum but critical literacy skills are underrepresented on the test. A critical literacy lens, as presented in the proposed theoretical construct, is also an effective overarching construct for what any literacy engagement might entail; thus, the underrepresentation of the skills and processes that are arguably inseparable from any literacy engagement is especially concerning. How literacy is conceptualized in a high-stakes testing context is significant in terms of what test results can be said to represent. It is also significant in terms of how literacy is presented to test takers and experienced by them as they engage in the testing process. In the following chapter, I present the qualitative methodology being used to conduct the outcomes analysis.

CHAPTER 5. METHODOLOGY AND METHODS

The construct analysis presented in Chapter 4 demonstrated that Ontario's high-stakes literacy test is based on a selective set of skills that together form a limited literacy construct. In this chapter, I present the methodology and methods for an inquiry into the outcomes and the potential consequences of evaluating students' literacy skills in a high-stakes context based on a limited literacy construct. I highlight both the affordances and the limitations of the methods being used for this inquiry, and I conclude this chapter with a discussion of some of the ways in which the quality and the validity of this research can potentially be assessed.

Theoretical Framework

In this section, I present an overview of the research questions shaping this study. I then explain why qualitative research is a suitable methodology for conducting this research. Following this, I explain why I have chosen to use multiple methods, including case studies and arts-based research practices, to conduct this research.

Research Questions. This study investigates students' understandings and experiences of critical literacies in an educational context that includes the Ontario Secondary School Literacy Test (OSSLT). It also investigates how students perceive the OSSLT to be potentially influencing their development of critical literacy skills. Following Stake's (1995) recommendation to focus on two or three overarching research questions, this study is designed based on the following two central research questions:

- What are students learning about critical literacies in an educational context that includes the OSSLT?
- How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills?

The research questions guiding this study include both "descriptive" (Creswell, Hanson, Plano Clark, & Morales, 2007, p. 239; see also Flick, 2014, p. 153) and "explanatory" (Farquhar, 2012, p. 6; see also Flick, 2014, p. 153) types of questioning. Descriptive questions primarily seek a description of "a certain situation, state, or process" (Flick, 2014, p. 153). Explanatory questions "focus on a relation" (Flick, 2014, p. 153). Both "*what*" and "*how*" questions (Hesse-Biber & Leavy, 2011, p. 40) are being used to enhance understandings of the phenomenon under investigation. The first line of inquiry focuses on what students report as their understandings

and their experiences of (critical) literacies in an educational context that includes the OSSLT. The second line of inquiry focuses on what students report as their experiences with the OSSLT.

Participants in this study were invited to reflect upon and critically analyze and comment on their understandings and their experiences of both literacies and the OSSLT. Table 12 and Table 13 illustrate how the central research questions have been broken down into sub-questions followed by categories of questioning that helped organize and direct this inquiry. The research activities used to collect data have also been mapped onto the sub-questions to identify the multiple methods through which data was collected.

Table 12. *Presenting the Research Questions: First Line of Inquiry*

First Central Research Question	Line of Inquiry 1 Sub-Questions	Related Categories of Questioning	Research Activities
What are students learning about critical literacies in an educational context that includes the OSSLT?	How are students understanding and conceptualizing literacies?	1. Understandings of Literacy/Literacies • Defining Literacy/Literacies	• Questionnaire • Graffiti Walls • Journaling • Interviews and Conversations
	How do students relate their life experiences to literacies and/or to critical literacies?	2. Experiences with Literacies (and Critical Literacies) • Relating Experiences to Literacies	• Questionnaire • Activity Handouts: Literacies Graphic Organizer; Character Mapping; OSSLT Test Items • Photography • Journaling • Interviews and Conversations
	Where do critical literacies fit within students' conceptualizations and/or experiences of literacies?	1. Understandings of Critical Literacies (<i>Continued</i>) • Focusing on Critical Literacies	• Activity Handout: Literacies Graphic Organizer • Journaling • Interviews and Conversations
	Who/What do students say influences their understandings and their experiences of literacies?	2. Experiences with Literacies (and Critical Literacies) (<i>Continued</i>) • Exploring Multiple Contexts and Literacy Resources	• Interviews and Conversations
	Do students say they value literacy skills?	3. Value of Literacy Skills • Valuing Particular Literacy Skills • Planning to Improve Skills • Planning for Future Education and Employment Goals	• Questionnaire • Activity Handout: OSSLT Test Items • Graffiti Walls • Interviews and Conversations

Table 13. *Presenting the Research Questions: Second Line of Inquiry*

Second Central Research Question	Line of Inquiry 2 Sub-Questions	Related Categories of Questioning	Research Activities
How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills?	How are students experiencing the literacy test?	4. Experiences With the Test • Knowledge of the OSSLT • Purpose of the OSSLT • Experiences With Test Preparation • Experiences Writing the OSSLT • Reflections on the Test's Format and Content • Skills Assessed and Evaluation Criteria • Thoughts and Feelings About the Test – Valuing the Test • Comments on the OSSLC	• Questionnaire • Activity Handout: Sample OSSLT Test Items • Graffiti Walls • Interviews and Conversations
	What are students' perceptions of the potential influence of the literacy test?	5. Perceptions of the Influence of the Test • Receiving and Interpreting Test Results • Accurate Representation of Skills? • Influence on Self-Image, Courses, Future Plans • Influence on Relationship With Literacies • Influence on Classroom Environment and Learning • Learning From the OSSLT?	• Graffiti Walls • Words in a Bag • Interviews and Conversations

Qualitative Research. Based on the research questions, qualitative research is an appropriate methodology for this study. Patton (2015) argues that qualitative inquiry is helpful for:

(1) Illuminating meaning; (2) Studying how things work; (3) Capturing stories to understand people's perspectives and experiences; (4) Elucidating how systems function and their consequences for people's lives; (5) Understanding context: how and why it matters; (6) Identifying unanticipated consequences; (7) Making case comparisons to discover important patterns and themes across cases. (pp. 12-13)

How we engage in research affects what we can learn, which is why understanding the particular fit of a methodological framework in relation to a study's research questions is important.

Qualitative researchers ultimately focus on “understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (Merriam, 2009, p. 5). This is precisely the sort of information I sought to collect, analyze, and represent throughout this study. When collecting data that relate to a contextualized use of a testing program, the focus is on understanding individual contexts. This integral aspect of validity research is accomplished through an essentially qualitative process.

The following is an overview of some of the values and priorities often aligned with qualitative research that have guided the design of this study.

Identifying and seeking to understand outcomes. The focus of this study is on outcomes. Outcomes can be understood as consequences of whatever has come before or has previously occurred. One of the unique characteristics of qualitative research is “searching for happenings” rather than “searching for causes” (Stake, 1995, p. 37). Before being able to explain “why things [are] the way they [are,]” we must first understand “how things [are]” (Stake, 1995, p. 38). The explanations constructed throughout this study are intended to serve as evidence of “personal interpretation” (Stake, 2010, p. 31) rather than as proof of cause and effect relationships. Through this study, it is possible to make observations and to report on how students are describing their perceptions of their understandings and their experiences of both literacies and the literacy test. It is also possible to observe how students’ understandings and experiences of literacies, their literacy education, and their experiences of the literacy test are all interconnected.

Privileging subjectivity and reflexivity. Subjectivity is one of the defining markers of qualitative research (see Stake, 2010, p. 29). Researchers are recognized as playing a prominent role in shaping the outcomes of the research. Reflexivity draws the focus onto the researcher’s role as a designer of the research and a constructor of meaning. It is a form of self-assessment that involves engaging “in continuous self-critique and self-appraisal” (Dowling, 2006, p. 8). Part of the process of engaging reflexively “involves turning back on oneself in order that processes of knowledge production become the subject of investigation” (May & Perry, 2014, p. 109). Engaging reflexively is to participate in “an ongoing examination of what I know and how I know it” (Patton, 2015, p. 70). Jootun, McGhee, and Marland (2009) recommend constructing a “decision trail” (p. 43) to assist a researcher in working through how knowledge is being constructed throughout a study. The purpose of reflecting throughout the research process is to consider if there might be other potentially more productive ways to conduct a particular inquiry. An important part of reflexivity is recognizing the partiality and limitations of one’s awareness. It is, thus, helpful to be mindful of the possibility that research could be conducted otherwise.

Conceptualizing research as interpretation and as the construction of understanding. Qualitative research is about developing and constructing “understanding” (Merriam, 2009, p. 15). It is about making “sense of, or interpret[ing], phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2008, p. 4), and this includes not only what the participants bring to the research context but also how the researcher interprets (Denzin, 2009, p. 85) and makes meaning (Leavy, 2009, p. 231) of the data being constructed. It is the role of the

qualitative researcher to interpret and make meaning of data being collected and to share developing understandings. The participants also play an important role in determining the outcomes of the research as the composers and contributors of the texts being analyzed.

Working with complexity and contextualization. One of the values frequently shared by qualitative researchers is a “commitment to understanding the complexity of the phenomenon of interest” (Peshkin, 1988, p. 416). An important part of qualitative research is working with “*thick description[s]*” (Stake, 1995, p. 39) such that there is a context in which complexities can be represented and meaning can be made. Merriam (2009) suggests that research reports be “*richly descriptive*” (Merriam, 2009, p. 16) to also make it possible to contextualize findings. Contextualizing the findings of a study helps clarify the scope of the research, and it sets up parameters to guide and to inform a reading. It also affords readers an opportunity to make sense of the research based on the particular analytical lenses and understandings presented by a researcher. Despite valuing complexity and contextualization, with qualitative research comes an acceptance that data are partial and that not everything can be known or learned through any one investigation. No context can ever be fully captured, analyzed, or represented. Denzin and Lincoln (2008) position qualitative research as a “situated activity” (p. 4). Hammersley (2008), who writes critically of qualitative inquiry, states, part of qualitative research, like all forms of research, necessarily involves “processes of theoretical abstraction and data reduction” (p. 44). What makes qualitative research unique is when and how the reduction of the data takes place. Cronbach (1954) considers that psychometricians that follow a more quantitative practice tend to focus on “a practical compromise” between complexity and reduction, which is “to simplify problems enough[,] so that scientific methods can come to grips with them” (as cited in Peshkin, 1988, p. 417). Rather than focusing an inquiry based on what research methods make possible, qualitative inquiry works with questions that invite in the complexity of lived experiences, and strives to use methods that make it possible to effectively learn from the collected data. A goal of qualitative research is to contextualize the research and how understandings are being constructed such that the complexity, as well as the selective partiality of what is being studied and represented, can be understood and interpreted in terms of a few potential parameters.

Multi-Method Research. This study uses a combination of two methods. I have used the structure of case studies and the philosophies and techniques of arts-based research practices to shape and inform this study. These two methods offer complementary sets of strengths, and they

have the capacity to work together “synergistically” (Duke & Mallette, 2001, p. 348). Using multiple methods at once acknowledges and counterbalances the limitations inherent in using any singular method. Since research methods can each make “the world visible in a different way” (Denzin & Lincoln, 2008, p. 5), in qualitative research, “there is frequently a commitment to using more than one interpretive practice in a study” (p. 5). Neill (2012) encourages the use of multiple measures in assessment contexts for similar reasons. Relying on one sole method, approach, or tool can limit opportunities to learn. Similar understandings are held by those who design mixed methods studies that draw on both qualitative and quantitative approaches to research (see Creswell, 2014, 2015; Creswell & Plano Clark, 2011) and also by those who engage in critical multiplism (see Figueredo, 1993; Letourneau & Allen, 1999; Patry, 2013). Critical multiplism recognizes that “there is no one perfect scientific method, as all methods have limitations” (Letourneau & Allen, 1999, p. 624). Multi-method research does not “give us a closer approximation to the ‘truth’” (Ahmed & Sil, 2012, p. 948); however, when multiple methods are used, it becomes possible to triangulate data (see Burton, 1998; Farquhar, 2012; Jick, 1979; Patton, 2015; Stake, 1995), which is a form of layering multiple perspectives (see Fielding, 2012). Multiple method research requires an in-depth understanding of each individual method to be able to compatibly combine methods. This artful practice of weaving multiple methods together can result in a “cross fertilisation of insights from different methods” (McKendrick, 1999, p. 42) that can enrich the quality of research. Using hybridized research processes can result in unique findings. The challenge of multi-method research is understanding what the added value is of each method being used. In terms of sharing the findings, using multiple methods can encourage “‘cross-cultural communication’ among researchers trained in different methods” (Ahmed & Sil, 2012, p. 948). This is particularly relevant for this study, which relates to the fields of both educational measurement and literacy education.

Case Studies. As a research design, case studies value rich descriptions and contextual information, and they make it possible to highlight the understandings and the experiences an individual wishes to share. Case studies are, thus, an appropriate fit for this study. An important part of case study research, and what distinguishes some case studies from others, is how a case is defined. When defining a case, it is important to consider what the research questions are asking (Yin, 2014, p. 31). For this study, each individual participant is being regarded as a unique case. The focus of each case is on a participant’s understandings and experiences with

critical literacies and with a high-stakes standardized literacy test. The way in which cases are being used as part of the design of this study aligns with Stake's (1995) explanation of what an "instrumental" (p. 3) case study seeks to achieve. While the focus of an "intrinsic" (p. 3) case study is on understanding a specific case of interest, meaning the particular case being investigated is of utmost importance for the study, the purpose of an "instrumental" (p. 3) case study is to "understand something else" (p. 3) and "to provide insight into a larger topic" (Hesse-Biber & Leavy, 2011, p. 258). The goal of an instrumental case study is "accomplishing something other than understanding" (Stake, 1995, p. 3) a particular case. When there is "an aspect of the case" (Hamilton & Corbett-Whittier, 2013, p. 13) that is particularly relevant to the phenomenon being investigated, the design can be considered to be an instrumental case study. Hamilton and Corbett-Whittier (2013) describe instrumental cases as being "delimited" (p. 14) because of the specific focus of the investigation. Merriam (2009) notes that it is possible with case study research to "fence in" (p. 40) what will be studied, which helps define and clarify the focus of an investigation. In this sense, the cases being constructed for this study can be understood as "bounded systems" (Farquhar, 2012, p. 7; see also Merriam, 2009). The focus and organization of case studies make possible an in-depth study of a particular phenomenon. Farquhar (2012) claims that "case study research is particularly suited for looking at a phenomenon *in depth* and *in context*" (p. 38).

When there are several cases being studied, the study can also be called a "*collective case study*" (Stake, 1995, p. 4) or a multiple case study (Stake, 2006). Multiple cases can be "studied together to investigate a larger phenomenon or population from which the cases are drawn" (Hesse-Biber & Leavy, 2011, p. 258). The goal of multiple case study research is ultimately to create an "opportunity to learn" (Stake, 1995, p. 6), and, in the case of a multiple case study that is also an instrumental case study, the focus is on the broader phenomenon as it relates to each case and to the collection of cases. Stake (2006) cautions that, in an effort to emphasize "the common relationships across cases" (p. 39), the differences between the cases and the uniqueness of each case should not be overlooked. One of the benefits of a multiple case study is to "show how the program or phenomenon appears in different contexts" (Stake, 2006, p. 27).

Arts-Based Research Practices. Arts-based research is the other method being used in this multi-method study. According to Leavy (2009), "Arts-based research practices are particularly useful for research projects that aim to *describe*, *explore*, or *discover*" (p. 12), which makes these

practices an appropriate fit for this study. Sinner, Leggo, Irwin, Gouzouasis, and Grauer (2006) reviewed thirty arts-based dissertations from the University of British Columbia, and, as a product of their review, they identified four attributes they considered to be reflective of what arts-based research entails. The four attributes included demonstrating “commitment for aesthetic and educational practice, inquiry-laden processes, searching for meaning, and interpreting for understanding” (p. 1234). Despite using arts-based research practices in the collection and analysis of the data, the ways in which this study is being presented aligns with Cole and Knowles’ (2008) definition of what arts-informed research entails. Cole and Knowles (2008) define arts-informed research as “a mode and form of qualitative research in the social sciences that is influenced by, but not based in, the arts broadly conceived” (p. 59). Blending the arts and the sciences through research is a sort of “boundary crossing” (Finley, 2008, p. 100), which creates unique opportunities for meaning making. Designing a study that uses “hybrid forms of artistic and scientific scholarship” (Cahnmann Taylor, 2008, p. 246) can be conceptualized as a “blurred genre” (p. 247) of research. The blurring of genres “critiques the privilege of language-based ways of knowing” (Finley, 2008, p. 100), which is relevant for this study on literacies and standardized testing. Integrating the arts within the design of this study is an acknowledgement that knowledge can be constructed and expressed through a diversity of modes.

Methodological Strengths and Limitations. There are numerous strengths and complementary affordances of using the structure of case studies and the philosophies and techniques of arts-based research to shape this study. In this section, I present the affordances of each of these methods to explain how these design choices enhanced the quality of this study. I also discuss a challenge and potential limitation of using multiple case study and arts-based research as methods for this study.

Using multiple case study as part of the design of this inquiry made it possible to:

- *Focus on Individuals and Contextualize Data:* With multiple case study, it is possible to present detailed and contextualized cases (see Yin, 2014, p. 4) that highlight what an individual contributes to the study of a phenomenon.
- *Draw on Multiple Sources:* Multiple and cross-case analyses make it possible to construct an understanding of a phenomenon drawing on multiple sources (see Yin, 2014, p. 4).
- *Challenge Thinking:* Engaging with multiple perspectives makes possible the ongoing “deconstruction and the subsequent reconstruction of various phenomena” (Baxter &

Jack, 2008, p. 544), which can challenge how knowledge is being constructed. Case studies can “render the unfamiliar familiar and the familiar strange” (Simons, 1996, p. 230) when the phenomenon under investigation is considered through multiple cases.

- *Make a Contribution to Knowledge:* Merriam (2009) claims that case study research “plays an important role in advancing a field’s knowledge base” (p. 51).
- *Study a Program and Inform Decision Making:* Case studies are a productive foundation for decision making. Patton (2015) notes that “[i]nstrumental case studies can be used by program and policy decision makers, or by practitioners and funders, in what has come to be called evidence-based decision making” (p. 295). Merriam (2009) similarly notes that “[c]ase study has proven particularly useful for studying educational innovations, evaluating programs, and informing policy” (p. 51).
- *Increase Accessibility:* The structure of case studies might be a familiar and easily recognized way to present data.

Using arts-informed research practices as part of the design of this study made it possible to:

- *Facilitate Learning:* The arts facilitate learning (see Eisner, 2002b, 1986/2005; Ewing, 2012; Grauer, Irwin, de Cosson, & Wilson, 2001; Schiller, 2001; Scholes & Nagel, 2012; Whitfield, 2009). They can provoke or evoke different forms of thinking (see Eisner, 1991, 1993, 2002a; Irwin, 2004; Springgay, 2008), and they can “jar people into seeing things differently, to transcend differences, and to foster connections” (Leavy, 2009, p. viii). The arts also privilege exploration and experimentation, which can facilitate learning (see Eisner, 2002a; Greene, 1995).
- *Learn in a Diversity of Contexts:* The arts demonstrate that knowledge can be constructed and meaning can be made in a diversity of contexts. Cole and Knowles (2008) suggest:

Life is lived and knowledge made through kitchen table conversations and yarnin’ at the wharf or transit station or coffee shop or tavern, in the imaginative spaces created between the lines of a good book or an encounter with an evocative photograph, in an embodied response to a musical composition or interpretive dance. These moments of meaning making, however, are not typically thought of as Knowledge. (pp. 59-60)
- *Engage With Multimodalities:* Multimodal practices are thought to help “reframe” or “recast” and reposition “students who are labeled ‘at-risk’” (Siegel, 2012, p. 674) by enabling those who might struggle to demonstrate their knowledges and skills through traditional modes to engage using other modes. With the added complexity of engaging with multiple modes, all participants can also be challenged to re-examine and reflect upon their experiences through multiple lenses.
- *Co-Construct Knowledge:* The arts make possible the “co-construction of knowledge” (Osei-Kofi, 2013, p. 137). They help draw attention to how the participants, the

researcher, and any readers of the research engage in collaboratively deconstructing and reconstructing understandings and experiences in an effort to understand a phenomenon.

- *Promote Dialogue:* Working with arts-based practices is an effective mechanism for “*promot[ing] dialogue*, which is critical to cultivating understanding” (Leavy, 2009, p. 14). Leavy (2009) observes that “[t]he kind of dialogue promoted by arts-based practices is predicated upon *evoking meanings*, not denoting them” (p. 14). There is something about the ambiguity and unscripted ways in which multimodal texts can be read that creates opportunities for wonder and critical reflection.
- *Evoke Emotional and Empathic Engagements:* The arts can “evoke emotional responses” (Leavy, 2009, p. 14), and engagement with the arts can “facilitate empathy” (p. 14).
- *Increase Accessibility:* Making multiple modes available increases the number of access points rendering a study potentially more accessible for participants. Drawing on the arts can also make research more accessible to a diverse readership (see Cahnmann Taylor, 2008; Cole & Knowles, 2008). Cole and Knowles (2008) identify “accessibility (and breadth of audience)” (p. 60) as one of the “main goals” (p. 60) of arts-informed research. The arts “honor multiple ways of knowing” (Osei-Kofi, 2012, p. 137), which makes both contributing to the research and making meaning of the research more accessible.

One of the challenges of using case studies as a research method is that there is limited guidance with regards to designing a case study. Case studies present a potential structure and organization of the data, but “a comprehensive and standard catalog of research designs for case study research has yet to emerge” (Yin, 2014, p. 27). According to Merriam (2009) though, this structural approach specifically “does not claim any particular methods for data collection or data analysis” (p. 42). Case studies are not often explicitly defined as a research method likely because there are no specified methods for how a case study can be conducted (see Hamilton & Corbett-Whittier, 2013, p. 10; Hesse-Biber & Leavy, 2011, p. 225; Hyett, Kenny, & Dickson-Swift, 2014; C. B. Meyer, 2001; VanWynsberghe & Khan, 2007). Even though specific practices are not aligned with case studies, researchers tend to acknowledge that case studies require “in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports)” (Creswell et al., 2007, p. 245). Merriam (2009) also explains how “[a]ny and all methods of gathering data, from testing to interviewing, can be used in a case study, although certain techniques are used more than others” (p. 42). For case studies, “tailoring the design and data collection procedures to the research questions” (C. B. Meyer, 2001, p. 330) is a significant part of the process of designing a case study.

One of the challenges of including arts-based practices as part of the design of the data collection process is that the artefacts produced have the potential of being richly dense and complex texts to unpack during the analysis phase of the research. Some multimodal forms of texts can be particularly challenging to engage with (see Hagood, 2009; Kirk, 2007; K. A. Mills, 2010). What makes texts challenging is when they require a researcher to work with multiple modes of representation (see Lotherington, 2011) and with multiple sign systems (see Cowan & Albers, 2006; Devereaux & Wheeler, 2012; Leigh, 2012; Short, Kauffman, & Kahn, 2000). Code-switching is primarily considered to be “an oral phenomenon” (Barnes, 2011, p. 24); however, this notion of code-switching can also apply to what it means to work with multiple systems through diverse communicative processes, including the composition and analysis of multimodal texts. When attempting to make sense of multimodal texts, “familiar[ity] with the grammars of both languages” (Palmer, 2009, p. 44) or with the multiple sign systems being used is needed. Multimodal texts can also present “dynamic relationships” (K. A. Mills, 2009, p. 106) between modes though. Arts-based research presents many affordances with respect to the possibilities that are made available to a researcher, but it is up to the researcher to be able to see value in potential moments for meaning making and to become a critical textual analyst to work through artefacts being contributed to a study.

Data Collection

In this section, I outline the data collection methods used for this qualitative multi-method study. This section begins with a detailed overview of the research activities used to collect the data. In order to demonstrate what each data source contributes to the study, each of the research activities has been cross-referenced and mapped onto the research questions guiding the investigation (see Table 12 and Table 13). Each data source was designed to serve a specific purpose and to complement another data source in specific ways. For instance, as a way of collecting data that relates to the first central research question, and focusing on participants’ understandings of literacies and critical literacies in particular, (a) participants were asked to define literacies on the project questionnaire; (b) on the graffiti walls, they were invited to share everything they know about literacies; (c) two of the prompts in the journal were ‘Literacies are . . .’ and ‘Literacies are not . . .’; and, (d) during the interviews, I asked participants if they were familiar with the term critical literacies. These are just a few of the opportunities through which participants could contribute data that could collectively be used to make sense of how the

participants were understanding literacies and critical literacies. To conclude this section, recruitment practices are outlined, and the research sites and the participants are presented.

Overview of Research Activities. The research activities were designed with the intention of offering participants an opportunity and a space to critically engage with their educational experiences. An array of research activities were designed that were intentionally open-ended and unstructured creating multiple possibilities through which the participants could potentially engage. Janks (2000) offers a critical insight into the difficult decision-making process that surrounds choosing what forms to make available to students in educational contexts. She states:

If we provide students with access to dominant forms, this contributes to maintaining their dominance. If, on the other hand, we deny students access, we perpetuate their marginalisation in a society that continues to recognise the value and importance of these forms. (Janks, 2000, p. 176)

For the participants who might seek comfort in something that would be familiar, there were spaces in which they could potentially contribute to the study, and for the participants who might appreciate new opportunities, or for whom the dominant modes, such as providing a written response to a question on a handout, might not make it possible for them to convey their thinking as effectively, there were also spaces through which they could potentially engage. With these considerations in mind, data collection included (a) a questionnaire; (b) activity handouts; (c) a focus-group style graffiti walls activity; (d) a photography activity; (e) a journaling activity; (f) a words in a bag activity; (g) interviews and group conversations; as well as (h) researcher's field notes, reflections, and photographs.

Questionnaire. The participants were invited to complete an introductory questionnaire. This was an opportunity to collect a bit of contextual information about each participant, including their grade levels, their self-declared test results, if they are enrolled or have taken the OSSLC (i.e., the literacy course), or if they have satisfied the literacy graduation requirement through another method (e.g., portfolio adjudication). There were also two questions where the participants could write about what the terms *literacy* and/or *literacies* mean to them, and they could list five to ten examples of when, how, and why they engage with literacies. The participants were also asked to describe their experience(s) taking the literacy test. Lined space equivalent to approximately half a page per question was provided for participants' responses.

Activity handouts. A collection of activity handouts was used as a supplement to the interviews. The handouts were another approach for asking the participants questions. The

handouts provided the participants with time to pause, to re-read the questions, and to reflect on their responses. The activity handouts included a literacies graphic organizer (see Appendix F), which invited the participants to list the literacy skills they have, the literacy skills that they struggle with or find more challenging, and the literacy skills that they want to improve. The participants were also asked to note their current literacy goals and what they predict might be their future literacy interests, needs, and goals. Another one of the activity handouts was a self-portrait mapping (see Appendix G) that gave the participants an opportunity to share their interests, influences, success and challenges at school, community involvement, goals and plans after high school, a portrait, and a suggested pseudonym. A sample of the OSSLT's Student Questionnaire (EQAO, 2010d) was also provided to the participants to serve as a reminder of the types of information EQAO values and considers in regards to students' literacy habits. The questions on the OSSLT's Student Questionnaire were helpful for learning more about students' self-reported reading and writing habits, their access to materials, as well as their English language background. The participants were also given a selection of sample test items from past OSSLTs. The sample test items included: (a) grammar multiple-choice questions (EQAO, 2013f); (b) a short story paired with multiple-choice questions and a short written response (EQAO, 2013f); (c) a graphic text paired with multiple-choice questions (EQAO, 2013g); and (d) a prompt for writing a series of paragraphs (EQAO, 2013g), which is a long written response. Having these handouts available also provided a medium through which the participants could more accurately or concretely and critically discuss the format and content of OSSLT test items.

Graffiti walls. Two large white scrolls of paper were put up side by side or one above the other at the research sites. One of the walls was labelled "Literacies" and the other was labelled "OSSLT." The participants were provided with an assortment of supplies such that they could engage with the walls in a variety of ways. The participants were invited to write words, draw or sketch images, cut and paste images from magazines or newspapers, paint or finger paint, and to fill up the two walls to the best of their abilities. I provided paint, finger paints, brushes, plates, markers, pens, foam letters and numbers, magazines, newspapers, maps, construction paper letters and sheets, scissors, glue sticks, and assorted cleaning supplies. The print media sources were generously contributed from local magazine publishers and tourism offices. A new, but identical, set of print materials was made available at each research site. The participants were also given a two-page handout that corresponded with this activity (see Appendix H). One page

of the handout included questions that focused on literacies and the other page focused on the literacy test. The participants were invited to use the handout as a space for brainstorming, jotting down some preliminary thoughts, and for freewriting (Elbow, 1989, 1998). The questions on the handout were intended to give the participants ideas about what they could consider contributing to the graffiti walls. The handouts were also a potential alternative space for contributions should the participants not wish to contribute to the walls.

The participants were encouraged to talk with one another and to comment on the walls as they were creating them. According to Belzile and Öberg (2012), “Participant interaction is said to be the hallmark of the focus group method” (p. 460). One of the advantages of the focus group design is that a researcher’s “control over the topic and direction of the discussion” is lessened (Robinson, 2012, p. 392) at least to some extent, since the “participants both query each other and explain themselves to each other” (D. L. Morgan, 2004, p. 272). One suggestion offered to participants was that they could put a check mark or an ‘x’ next to any comments they either agreed with or disagreed with as a way of noting when something resonated with them or not. At two of the sites, conversations occurred throughout the creation process, but there was no clear point of completion when the participants came together to discuss the product as a whole. At one of the research sites, once the walls were sufficiently graffitied and the participants were satisfied with their contributions, the participants came together, and they had an opportunity to discuss a few specific items they might have wanted to highlight. D. L. Morgan (2004) notes that focus groups are often paired with other methods of data collection. The graffiti walls activity was audio and video recorded to make it possible to review how the walls were being constructed and what the participants chose to comment on in particular during conversations.

The goals of this research activity were to encourage the participants to engage with the topic of study in a largely undefined manner and to create opportunities for participant interaction through the collaborative design and composition of a text. The graffiti walls presented the participants with an open space in which they could practice mapping literacies and the OSSLT by remixing texts (see Knobel & Lankshear, 2008). When the participants were commenting on their own as well as one another’s contributions, they were layering and reconstructing narratives. Through her work with teacher candidates who were collaboratively creating and sharing life-sized body biographies of fictional characters as a part of a novel study, Morawski (2010) observed that “exposure to multiple understandings” (p. 5) would sometimes “lead to

more complex and sophisticated readings that feature both personal and interpersonal awareness and responsibility, including revisions of ideas or hypotheses” (Morawksi, 2010, p. 5).

Numerous literacy programs comment on the benefits of collaborative writing and text creation for youth (see Fair, Connor, Albright, Wise, & Jones, 2012; Gring-Pemble & Garner, 2010; Wisker & Savin-Baden, 2009; Yost & Vogel, 2012).

Graffiti is also sometimes considered to be a practice that goes against norms and strives for unconventional uses of language (see Carrington, 2009). Graffiti draws attention to the “production and placement of text” (Carrington, 2009, p. 411), and it can be “large, messy, prominent, [and] spatially transgressive” (p. 418). The graffiti walls did not have to be a space of resistance, but this mode of composition is sometimes perceived to be subversive making the walls a potential space for non-dominant discourses to be presented. Graffiti can take many forms and can serve diverse purposes and voices (see Alderman & Ward, 2008; Carrington, 2009; Iddings, McCafferty, & da Silva, 2001; Vall & Weiss, 2010). In this sense, the notion of graffitied texts was introduced as an activity that made it possible for the participants to feel as though they could challenge authorized narratives about what literacies might entail and they could unpack their literacy testing experiences in participant-directed ways.

Photography. The goal of the photography activity was for the participants to capture their experiences with literacies. Cameras were available for the participants to use. Similar to the graffiti walls, this activity invited the participants to explore the concept of literacies broadly. The questions guiding this activity were as follows: “Which literacies do you use every day? Which literacy skills do you use when you are at school, at home, in your community, at work, with friends, etc.?” This activity offered the participants at one of the research sites a chance to reflect on the project independently and outside of the confines of the research site. Since at the other two sites, each research session included time for engagement, the context in which the participants took photographs differed. Reflecting on her experiences taking photographs, Coats (2014) notes how taking photographs is like participating in an “activity of thinking” (p. 5). This photography activity was paired with interviews and conversations. The photographs acted as “visual ‘mnemonics’” (E. F. Smith, Gidlow, & Steel, 2012, p. 370) that could help participants recall specific examples that they might have wanted to discuss. Capturing understandings and experiences of literacies is abstract, but, through photography, the participants could reflect on their environment while practicing how to express their understandings and their experiences.

Many researchers have written about the benefits of using photography as an educational experience and as a research method when working with children and youth:

- Clark-Ibáñez (2004) presented a study of inner-city children's lives and their experiences of poverty using participant-produced photograph during interviews;
- Wilson et al. (2007) wrote about adolescents engaging with Photovoice, a program through which individuals are able to analyze and write about their photographs in an afterschool "youth empowerment" (p. 242) project.
- R. J. Beck (2009) reported on a study of youth participating in a school-based photography program focused on peace;
- E. F. Smith et al. (2012) presented a study where adolescents took photographs to capture their experiences of an outdoor education program;
- Zenkov, Ewaida, Bell, and Lynch (2012) shared a group of Grade 8 English language learners' photo-driven writing projects; and
- Sánchez (2015) wrote about a Grade 3 class' social change photo activism project.

When an activity encourages youth to make connections with their lives, their contributions are perceived to be more "authentic" (Zenkov et al., 2012, p. 11) and meaningful.

Journaling. Journals and research kits filled with potential journaling supplies were made available to the participants as another way through which they could contribute to this study. Similar to the photography activity, the participants at one of the research sites were invited to work on their journals between the research sessions, while the participants at the other two sites used the time during the research sessions to work on their journals. Inside the journal, which measured approximately 5.5 inches by 8.5 inches, there was a title page followed by a list of instructions for working with the journal. Each journal included twenty prompts or questions. Each prompt appeared at the top of an otherwise blank page. The following is a list of the prompts and questions included in each journal:

- Reading is . . .
- Writing is . . .
- Literacies are . . .
- Literacies are not . . .
- I read . . .
- My career will . . .
- Success is measured . . .
- Write a song or poem about the OSSLT/the Literacy Test.
- If you could write a letter to those responsible for the OSSLT, what would you write?
- A character sketch of me and my life:
- In English class, . . .
- If you could change five things in your English class, what would they be?

- If you could teach any of your classes for only one block/class, what would you teach? Why? How?
- What is the purpose of developing your literacy skills?
- How do literacies and culture connect?
- How do literacies and your world connect?
- Is language powerful? Why or why not?
- What do literacies look like?
- Do you read/write/respond critically? How and when?
- Are you literate? How do you know?

This type of journaling where the pages are unlined is sometimes called “visual journaling” (Deaver & McAuliffe, 2009, p. 615; see also Pente, 2002). While lined journals are often prepared sequentially, one page after another, a visual journal can challenge this sense of linearity and of the “relatively consistent succession of narrative entries” (Pente, 2002). Bagnoli (2009) claims, in her reflections on drawing for research, that a “creative task may encourage thinking in non-standard ways, avoiding the clichés and ‘ready-made’ answers which could easily be replied” (p. 566). Derry (2004), Kearney and Hyle (2004), and Literat (2013) also highlight the potential productivity of drawing in a research context. The reflective and meaning-making potential of journaling in particular has been emphasized by numerous scholars (e.g., Altman, 2008; Deaver & McAuliffe, 2009; Pente, 2002; Prior, 2013; Shumack, 2010). Journals have been used as pedagogical and dialogical tools in art education (see Collins, 2001), and journaling and journalism have been identified as productive practices for adolescents (see L. S. Clark & Monserrate, 2011; Dillon, 2010).

A research kit provided the participants with access to a diversity of materials that could facilitate engagement with this research activity. The supplies were, in part, intended to challenge the participants’ thinking about how they might want to respond to the prompts and questions. The contents of the research kit were secured in a white cardboard box. Inside the kits, there were pencils, pens, highlighters, staplers and staples, tape, glue sticks, scissors, erasers, sticky notes, clips, a paint set and a brush, pencil crayons, crayons, markers, clay, pipe cleaners, ribbon, pompoms, googly eyes, feathers, wooden sticks, stickers, letter sets, coloured foam sheets, construction paper, as well as white and lined paper squares. An open research kit that is partially filled is presented in Figure 8. Attached to many of the items in the kits were tags made out of cardstock that provided the participants with a bit of inspiration for how particular items

could potentially be used. The following is a list of some of the items and the messages that were included on the tags:

- For scribbling your thoughts and sharing your reflections (Writing Utensils)
- For attaching additional materials (Stapler)
- Even though there are no mistakes in this journal, for the self-editing you might try (Eraser)
- For getting messy! (Paint)
- Perhaps to show what you want others to know? (Googly Eyes)
- To help construct the words and/or phrases that best represent your thinking, wondering, questioning . . . (Stickers)
- For all the thoughts that spill over the edge of the journal pages (White Paper)

This journaling activity was paired with an interview and/or conversations with the participants.

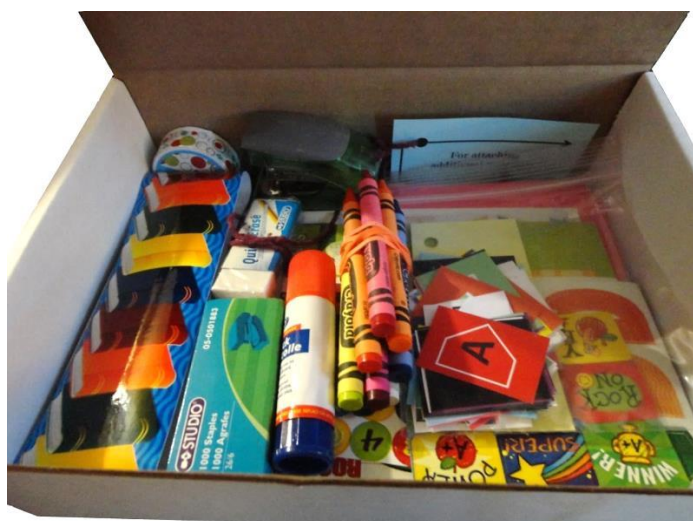


Figure 8. An Open Research Kit That Is Partially Filled

Words in a bag. In order to learn about what the participants perceived to have the greatest influence on their understandings and their experiences of literacies, I presented the participants with eight strips of paper drawn from a bag. Each strip of paper listed one of the following potential influences: Friends; Parents/Family; Teachers – English Class; Teachers – Other Subject Areas; The OSSLT (Literacy Test); Community; Books, Movies, TV, Music, Media, etc.; Other? I asked the participants to rank these items in terms of the influence or impact they believed these people and/or things have on their understandings and their experiences of literacy. This activity took place during the interviews and conversations, and the participants' explanations of their rankings were audio recorded. The participants' rankings were also photographed to be able to later recall how each participant positioned the words. With ordered lists of items, the placement of text is instrumental to understanding the content. The

participants' textual constructions could be understood to be diagrams in the sense that "diagrams permit the representation of relationships that are only vaguely understood" (Crilly, Blackwell, & Clarkson, 2006, p. 350). Providing the participants with concrete possibilities to consider also made introducing the notion of a literacy influence easier. Crilly et al. (2006) suggest that using diagrams in an interview setting can "allow researchers to bring concepts into the interview situation that they would be unable to verbalize clearly" (p. 350). Abstractly discussing literacy influences without a "common frame of reference" (p. 348) might have been more challenging. Each item was open to interpretation, and the participants had the option of including or excluding any potential influence they felt was not relevant. The undefined "Other?" also provided the participants with an opportunity to consider what else they might have thought could have been influencing their literacy education.

Interviews and group conversations. Semi-structured interviews (Freebody, 2003) were conducted with the participants individually at one of the research sites. There were three interviews with each participant that ranged in length from approximately twenty-five to eighty-five minutes. At the two other research sites, I had the opportunity to conduct a brief individual interview with each of the participants at some point during the research sessions; however, in order to not interrupt the flow of the participants working on the research activities, questioning opportunities were fractured into segments and conversations were conducted more informally. The directions of the conversations were usually derivative of a question that was first asked by a participant or of a comment a participant wanted to share, which I took as an invitation to engage and to talk about the research. After responding to the participant, I sometimes took these opportunities to ask one of the interview questions (see Appendix I) that seemed relevant to a participant's focus at that time, which was discerned or deduced based on what question(s) the participant was asking me or what comments they were sharing inspired by the activity they were working on. Some of these conversations were as brief as a few minutes. In some instances, multiple participants who were working nearby one another would also share their thoughts, and the participants would engage with one another's ideas. These conversations were more in line with the practices of a focus group. Most of the interview questions for this study were constructed in such a way that they could elicit more than 'yes' or 'no' responses (Rapley, 2004), so there was often space for discussion. One advantage of group interviews is the "ability to generate rich data through participant interaction" (Currie & Kelly, 2012, p. 408). Currie and

Kelly (2012) share examples from a study where the participants “freely disagreed with one another” and they were “correcting each other’s accounts of what ‘really’ happened” (p. 408).

The artefacts the participants were contributing to the study during the other research activities were intended to help inspire conversation during the interviews. Some of the interview questions were also specifically focused on what the participants might have been contributing to the study through other activities. Graphic or photo elicitation (see Bagnoli, 2009; Clark-Ibáñez, 2004; Crilly et al., 2006) is a process that involves using an image, sometimes created or provided by a participant, to provoke thinking and to encourage discussion. The “visual stimuli” (Crilly et al., 2006) used for the purposes of graphic elicitation might include self-portraits and milestone timelines (Bagnoli, 2009) or diagrams and concept maps (Crilly et al., 2006). For this study, there was a wide range of texts, such as the graffiti walls, the photographs, the journal pages, and/or any of the activity handouts that could be used to enhance the interviews or conversations. As noted in the interview guide (see Appendix I), one of the questions I asked the participants about their journals was if they could pick three or four pages and explain how they responded to the prompts. I also asked the participants which pages were their favourites, and I asked if they found any of the pages confusing or challenging to engage with. The interviews and conversations gave the participants opportunities to differently articulate, elaborate, and/or clarify their contributions and/or to ask questions. Collecting these supplementary narratives was one approach that supported developing “thick descriptions” (Geertz, 1973/2003). The goal of the semi-structured interviews was to attain a “deep mutual understanding” (Miller & Glassner, 2011, p. 133) where I could come to understand how the participants were understanding and experiencing literacies.

Numerous scholars have drawn attention to the dynamics and power relations between researchers and participants when discussing the potential benefits of graphic or photo elicitation approaches (see Clark-Ibáñez, 2004; Packard, Ellison, & Sequenzia, 2004; Sánchez, 2015; Van Auken, Frisvoll, & Stewart, 2010). When participants talk about the artefacts they are composing, they become “the expert” (Clark-Ibáñez, 2004, p. 174), or as Van Auken et al. (2010) note, “control is shifted from the researcher to the participant, as ‘the subject becomes the teacher’ (Harper, 1987, p. 12)” (p. 375). Abbott (2000) similarly explains how a participant can be positioned as “an expert, a knowledgeable other to whom [the researcher] can turn for clarifications, for elaboration, and for sense checking” (p. 62). When talking about artefacts, the

participants were familiar with the context in which the artefact was constructed and why they might have wanted to capture or share something. This type of exchange between the participant and the researcher establishes a “participatory” (Bagnoli, 2009, p. 549) and collaborative tone. Using artefacts within the interview process can also help both the researcher and the participants ease into the interview experience with “ice breakers” (Bagnoli, 2009).

Researcher’s field notes, reflections, and photographs. Throughout the research process, I took selective field notes, I wrote reflections on the sessions, and I took photographs. Field notes tended to include specific gestures made by the participants that seemed to relate to what they were trying to express (e.g., using air quotes, pointing to something, or making a particular facial expression) and any comments I was unsure of that I wanted to clarify. Following the research sessions, I also took time to reflect on how the process unfolded, and I considered the ideas that were shared by the participants that prompted me to think about the research in novel ways. I also took photographs both during and after the research sessions. For example, I took photographs of the research kits that would be used and the set-up of the graffiti walls at each research site. I also took photographs of the artefacts that were being produced, including the participants’ configuration of the literacy influences during the words in a bag activity and the graffiti walls. These artefacts helped with the data analysis and representation processes.

Research Sites and Participants. This study reports on the findings from working with ten students in Grades 11 and 12. Three of the participants participated in the study through a school site, and seven of the participants participated through a youth program at two sites. Other high school students were permitted to engage in the research activities at the two youth program sites; however, only findings from working with the Grade 11 and 12 students are being reported in this study. Each of the Grade 11 and 12 students presented unique narratives that reflected multiple years of high school literacy education experiences, and there was a sufficient amount of data to work with for the scope of the current investigation. The focus of this study is not to generalize from the sample of participants to a larger population of students, nor am I claiming that the sample of participants is representative of the broader population of Ontario high school students. There are, nevertheless, cases that reflect the understandings and the experiences of (a) students for whom English was their first language and others for whom English was not their first language, (b) students who had experiences successfully completing the literacy test and students who had experiences unsuccessfully completing the literacy test, and (c) students who

followed the university-streamed English courses and students who followed the college-streamed English courses. These are just three possible considerations that diversified the participants and, in some cases, diversified what they contributed to the study. According to Stake (1995), a small sample of cases “is unlikely to be a strong representation of others” (p. 4), but “[b]alance and variety” (p. 6) across cases can be helpful. Since each individual is being represented as a case, it is manageable to work with a group that is not too large. Stake (2006) recommends between five and fifteen cases (p. 22). The challenge is being able to “show enough of the interactivity” between the cases while being aware that “15 or 30 cases provide more uniqueness of interactivity than the research team and readers can come to understand” (Stake, 2006, p. 22). Table 14 presents a brief overview of the participants in terms of their grade levels, their English courses, their test results, and a note to distinguish which participants attended the same high schools. All names are pseudonyms.

Table 14. *Configuration of Participants Across Three Research Sites*

Research Site 1 (School)	Research Site 2 (Youth Program)	Research Site 3 (Youth Program)
Cadi Chandler Grade 11: ENG3U Successful the 1st time writing the OSSLT in Gr. 10 (School A) EFL: Yes	Donna Harlow Grade 11: ENG3C Successful the 1st time writing the OSSLT in Gr. 10 (School B) EFL: Yes	Porsche Sawyer Grade 11: ENG3U Successful the 1st time writing the OSSLT, Gr. Unknown (School E) EFL: No
Bert Jane Grade 11: ENG3U Successful the 1st time writing the OSSLT in Gr. 10 (School A) EFL: Yes	Finn Huxley Grade 11: ENG3C (Not continuing the semester; Was given a certificate to join the workforce; Planned to repeat/ continue the following year.) Unknown result the 1st time writing the OSSLT in Gr. 11 (School C) EFL: No	Ella Sage Grade 11: ENG3U Successful the 1st time writing the OSSLT in Gr. 11 (School E) EFL: No
Oliver Humphry Grade 12: ENG4C and OSSLC Unsuccessful the 1st time and the 2nd time writing the OSSLT in Gr. 10 and Gr. 11 (School A) EFL: Yes	Anne Dawson Grade 11: ENG3U Successful the 1st time writing the OSSLT in Gr. 10 (School D) EFL: No	Cora Elliot Grade 11: ENG3U Unsuccessful the 1st time writing the OSSLT in Gr. 11 (School E) EFL: No
		Sabrin Chester Grade 11: ENG3U Successful the 1st time writing the OSSLT in Gr. 10 (School F) EFL: No

Note. All names are pseudonyms. ENG3U = Grade 11 University Preparation English; ENG3C = Grade 11 College Preparation English; ENG4C = Grade 12 College Preparation English; OSSLC = The Literacy Course; EFL = English First Language.

Recruitment efforts in the school context focused on English classes in Ontario school boards, since the English curriculum is considered to be most explicitly “dedicated” (OMOE, 2007, p. 3) to literacy education. One teacher also participated in this study from the school site to provide additional contextual information about teaching critical literacies and how the literacy test relates to teaching the English program. Since the teacher’s identity cannot be effectively masked, especially as the sole participant of this type, the teacher’s contributions to the study are not being included. There were no collaborative activities that included both the teacher and the students, so excluding the data collected from working with the teacher did not alter the students’ contributions to the study.

Participant Engagement and Research Process. The ways in which the research activities unfolded at the school site and the youth program sites differed. The data collection schedule was tailored such that the students from the school site could potentially participate in all components of the study should they wish. At the youth program sites, there were two research sessions. Not all of the participants go to the youth program every week though, and, so, in all but one case, the participants only engaged with the study during one of the available sessions. Table 15 presents the timeline on which data was collected. The data collection process that was used at the school site was condensed when applied to the youth program sites to facilitate participation. Figure 9, Figure 10, and Figure 11 outline the research processes that were used at the research sites. Table 16 presents an overview of which research activities each participant engaged in.

Table 15. *Data Collection Timeline*

Site	Date (2014)	Research Activity
Research Site 1 (School)	February 19	Present the Study; Distribute Documents
	February 26	Collect Forms and Questionnaires
	March 24	Distribute Cameras, Journals, and Research Kits (Cadi, Bert, Oliver)
	March 31	Graffiti Walls; Collect Photographs (Cadi, Bert, Oliver)
	April 7	Interview 1; Collect Journals (Cadi, Bert, Oliver)
	April 14	Interview 2 (Oliver)
	April 17	Interview 2 (Cadi, Bert)
	May 5	Interview 3 (Cadi, Bert)
	May 15	Interview 3 (Oliver)
Youth Program	April 23	Visit with Main Staff
	May 9	Visit with Program Manager and Staff at Research Site 3
Research Site 2 (Youth Program)	June 10	Forms; Questionnaire; Handouts; Graffiti Walls (Donna)
Research Site 3 (Youth Program)	June 13	Forms; All Activities (Porsche, Ella, Cora)
Research Site 2 (Youth Program)	June 17	Forms; All Activities Except Graffiti Walls (Donna, Finn, Anne)
Research Site 3 (Youth Program)	June 20	Forms; All Activities (Sabrin)

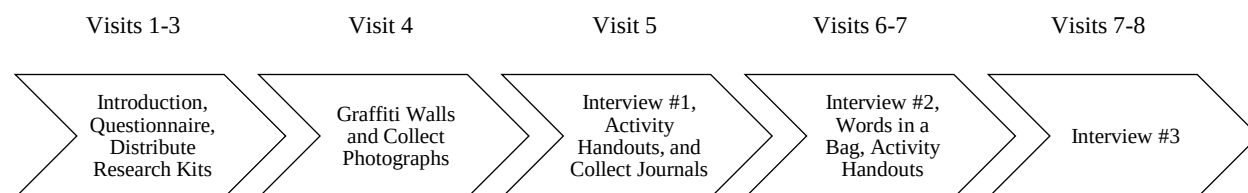


Figure 9. Research Process at Research Site 1 (School)

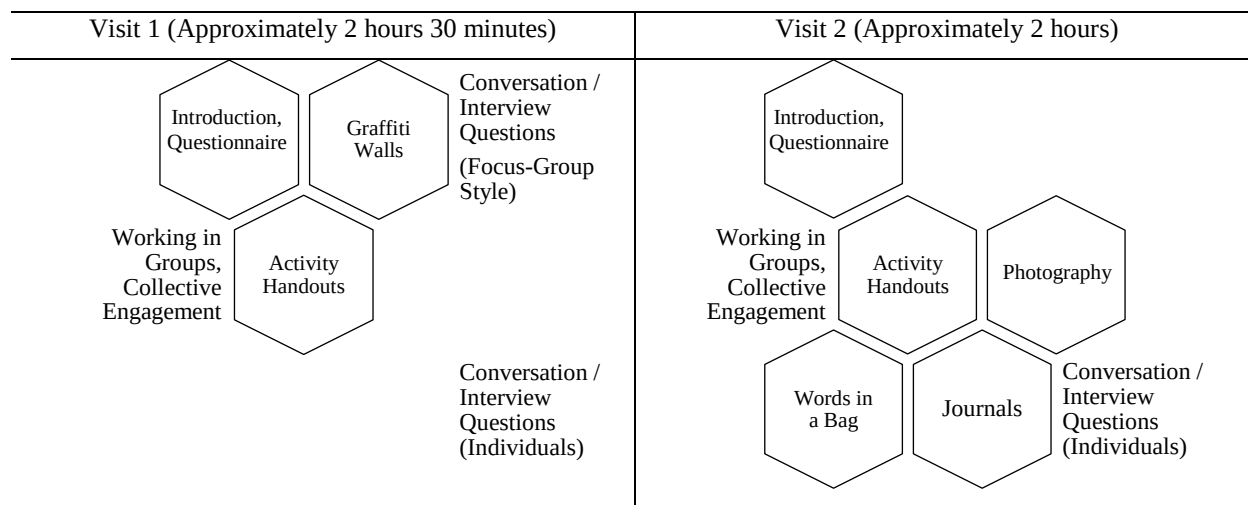


Figure 10. Research Process at Research Site 2 (Youth Program)

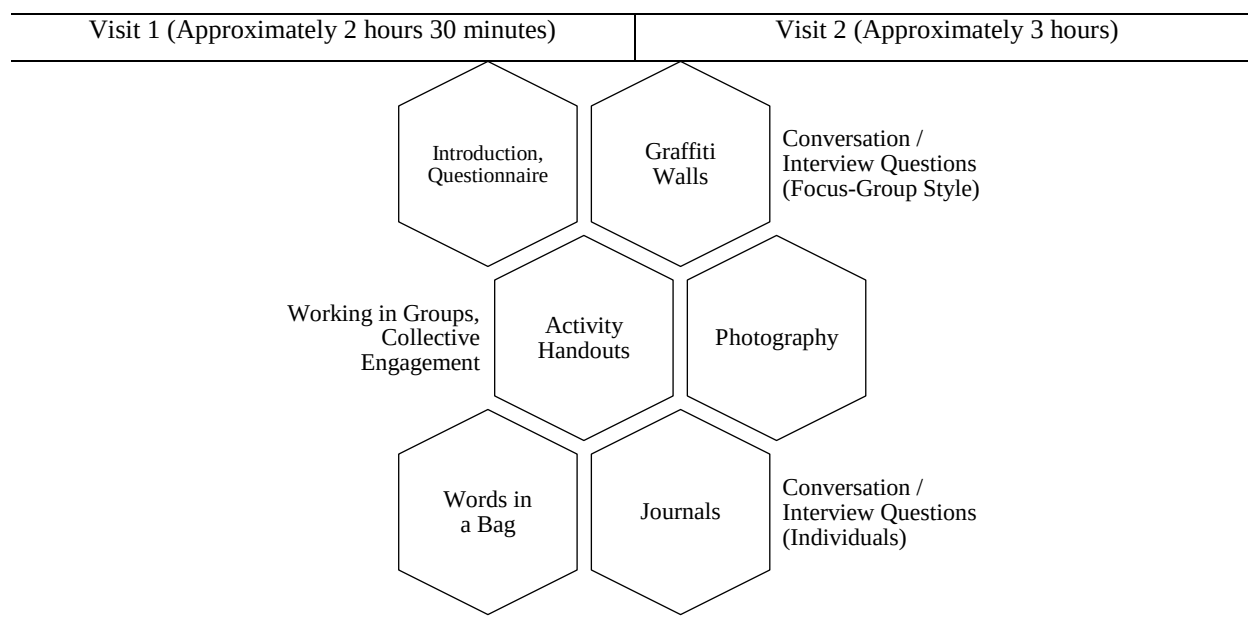


Figure 11. Research Process at Research Site 3 (Youth Program)

Table 16. *Participant Engagement at the Research Sites*

Activity	Research Site 1			Research Site 2			Research Site 3			
	Cadi	Bert	Oliver	Donna	Finn	Anne	Porsche	Ella	Cora	Sabrin
Questionnaire	X	X	X	X	X	X	X	X	X	X
Literacies Graphic Organizer	X	X	X	X	X	X	X	X	X	X
Self-Portrait Mapping	X	X	X	X	X	X	X	X	X	X
OSSLT Questionnaire	X	X	X	X	X	X	X	X	X	X
Sample OSSLT Test Items	X	X	X	X	X	X	X	X	X	X
Graffiti Walls	X	X	X	X	---	---	X	X	X	X
Graffiti Walls Handout	X	X	X	X	X	X	X	X	X	X
Photography	X	X	X	X	X	O	X	X	X	X
Journaling	X	X	X	X	O	O	X	X	O	O
Words in a Bag	X	X	X	X	X	X	X	X	X	X
Interview 1 / Conversations	X	X	X	X	X	X	X	X	X	X
Interview 2 / Conversations	X	X	X	X	---	---	---	---	---	---
Interview 3 / Conversations	X	X	X	---	---	---	---	---	---	---

Note. ‘X’ = The activity was completed to some degree; ‘O’ = The participant chose to not engage with the activity; ‘---’ = The activity was not available during the session in which the participant participated.

Data Analysis and Representation

This section begins with an overview of the interpretive stances and practices that reflect how I approached and performed the data analysis. I then outline in detail what the multimodal data analysis process for this study entailed. Each of the data analysis procedures presented in this section are mapped in relation to the different types of data that were collected. Mapping the methods in this way illustrates how diverse data types can work together “synergistically” (Duke & Mallette, 2001, p. 348) to enhance the analytical potential for making meaning.

Interpretive Stances and Practices. Data analysis for this study was designed and performed based on a few interpretive stances and practices. The following is an overview of how concepts of (a) critical literacies and (b) play, and the processes of (c) transacting with texts, (d) reading empathetically and for social change, and (e) thinking through writing, informed my approach.

Overarching lens: Critical literacies. The overarching lens informing the data analysis is reflective of the proposed critical literacies construct presented in Chapter 4. Central to a critical literacies engagement process is an understanding, acknowledgement, and respect of multiple perspectives, attention to issues of social justice, and an openness to learn within a reflective and a reflexive context. A critical literacies lens informs the ways in which I analyze texts. When engaging with the data for this study, I not only read the lines of text that were scribed on the page, but I also read textual features and images, and I reflected on what I perceived to be potential omissions and gaps in the data. The data analysis process was a continuous deconstruction and reconstruction of texts.

Approach to process work: Play. My approach to analyzing the data also relates to concepts of play, which emphasize both inquiry and performance (see Boldt, 2009; Hendricks, 2011; Latta & Hostetler, 2003; Nelsen, 2010; Schofield & Rogers, 2004). The creation of characters and profile and portrait pages, the layering of questioning, and storyboarding moments of dialogue, all of which are represented in the chapters that follow, are a few examples of the ways in which I playfully engaged with the data. Layering in, weaving, and overlapping data played a role in how the data analysis process unfolded for this study. Finley (2008) explains that “[a]mong the particular skills of the art-based researcher is the ability to play or, perhaps more accurately, to construct a field for play” (p. 102). There was an immersive engagement with the texts, a gradual getting to know the characters, and an increasing familiarity developing in terms of the stories the participants shared. As a researcher, I moved through the data analysis process with an open mind, an eagerness to learn, and an awareness that I was constructing meaning.

Positioning the researcher as a reader: Transactional readings. Rosenblatt’s (1982, 1985, 1986, 1995b, 1998, 2003) transactional model of reading is an effective lens for describing how I engaged with the data. Transactional readings focus on the reader, the reading experience, and the text, and the ways in which all three components work upon each other. The term *transacting* is intended to emphasize that reading is a “two-way process, involving a reader and a text at a particular time under particular circumstances” (Rosenblatt, 1982, p. 268). Rosenblatt distinguishes the concept of a ‘transaction’ from an ‘interaction’ (Rosenblatt, 1985, p. 96). Whereas ‘interactions’ are encounters between “separate, already-defined entities acting on one another” (Rosenblatt, 1985, p. 97), with transactional readings, meaning making is not “ready-made in the text, waiting to imprint itself on the blank tape of the reader’s mind” (Rosenblatt, 1982, p. 268); instead, what a reader brings to a reading, such as the lenses through which they analyze a text and the prior knowledge they might reflect on, can shape how meaning is made. When engaging with a text, a “reader draws on a residue of past literary and life experiences” (Rosenblatt, 1995a, p. 350) in order to make sense of and to give meaning to a text. A reading might be evidence of whatever ruminating or latent thoughts a reader might be (un)consciously working through. St. Pierre (2011) writes about an analysis experience as follows:

I imagine a cacophony of ideas swirling as we think about our topics with all we can muster – with words from theorists, participants, conference audiences, friends and lovers, ghosts who haunt our studies, characters in fiction and film and dream – and with our bodies and all the

other bodies and the earth and all the things and objects in our lives – the entire assemblage that is a *life* thinking *and, and, and . . .* (p. 622)

No two readers will likely share the same experience since the contextual factors that traverse one's reading map are never the same. Because of how a reader engages with a text, readings are "selective" (Rosenblatt, 1995a, p. 350). The way in which a reader approaches a text and the reader's motivation and interests can "narrow" (Rosenblatt, 1982, p. 269) the reader's attention.

Rosenblatt describes the process of reading words and symbols as decontextualization (Rosenblatt, 1982, p. 271). Rosenblatt rejects the "dualistic Saussurian focus on sign and signifier" (Rosenblatt, 1998, p. 890) and the understanding of "language as primarily a closed, completely self-contained, system or code, an autonomous set of arbitrary rules and conventions that directs our thought" (p. 890). When reading, a reader is "apply[ing] the symbol to new contexts and situations" (Rosenblatt, 1982, p. 271) and to prior knowledge and experience in an effort to make sense of a text. Rosenblatt draws on the works of "Charles Sanders Pierce, William James, and John Dewey" as well as Franz Boas and Mead who ground "language firmly in its human context" where there is an acknowledgement of a "linguistic triad," which includes, according to Pierce, "'sign,' 'interpretant,' [and] 'object'" (p. 890). Rosenblatt notes how Vygotsky's work, which attributes significance to the social context (p. 890), relates to these theories. Vygotsky (1962) states, "A word acquires its sense from the context in which it appears; in different contexts, it changes its sense" (as cited in Rosenblatt, 1998, p. 890).

Rosenblatt's work is acknowledged by many with heartfelt recognition of the impact she has had on what it means for an individual reader to transact with texts (see Allen, 1988; Bradley, 2005; Claggett, 2005; Dressman & Webster, 2001; Elliot, 2008; Flynn, 2007; Hosenfeld, 1999; Locke, 2005; K. E. Smith, 2008; Taylor, 2004). Numerous scholars have also applied Rosenblatt's theories to practice (e.g., Connell, 2000; Damico et al., 2009; J. R. Davis, 1992; Faust, 2000, 2001; Jewett, 2004; Justman, 2010; H. Mills, Stephens, O'Keefe, & Waugh, 2004; Morawski & Gilbert, 2008; Pantaleo, 2013) demonstrating that her work offers promising potential for both qualitative research and literacy research in particular.

Purpose of reading: Reading empathetically and reading for social change. Although many of Rosenblatt's theories of reading resonate with my thinking, there are limitations to the efferent-aesthetic continuum Rosenblatt proposed. Rosenblatt argued that a reader's purpose in reading, which reflects the goals and interests of a reader, influences the type of reading

experience that a reader might have when transacting with a text (see Rosenblatt, 1982, 1998, 2003). If a reader's goal is focusing on "accumulating what is to be carried away at the end of the reading" (Rosenblatt, 1982, p. 269), such as reading for information, seeking "directions for action, as in a driver's manual" (pp. 268-269), or "seeking some logical conclusion" (Rosenblatt, 1982, pp. 269), Rosenblatt would consider this to be an "efferent" reading (Rosenblatt, 1982, pp. 269). "[E]fferent" is "from the Latin word meaning 'to carry away'" (Rosenblatt, 1982, p. 269). Whereas efferent readings are focused on extracting information from texts for future use, aesthetic readings are focused on the experience of reading in the moment (Rosenblatt, 1995b, pp. 32-33). Choo (2010) explains, "efferent reading fulfills the utilitarian function of comprehending the text while aesthetic reading fulfills the transcendental function of experiencing the text" (p. 169). For Rosenblatt, "*Any text can be read either efferently or aesthetically*" (Rosenblatt, 1986, p. 124). It is not the text that determines the reading experience; it is how the individual approaches the transactional experience that matters. Just as Rosenblatt eschews the dualistic and binary divide of reader and text and creates a relationship between the two, she also emphasizes that efferent and aesthetic readings should be placed on a continuum more so than comprising an either/or dualism (Rosenblatt, 1991, 1995a, 1998). Rosenblatt (1978/2004) states though that it is "necessary to make clear the distinction between the two kinds of reading" (Rosenblatt, 1978/2004, p. 23). Although Rosenblatt made it clear that she was not proposing a dualism or a strict set of binary experiences but rather two extremes that are more often than not blended, the linear image of a continuum limits what is considered to be possible with regards to how and why individuals read. In the context of this study, it is important that reading be about more than reading primarily for information (efferent) or primarily for experience (aesthetic) as set out in Rosenblatt's efferent-aesthetic continuum.

Many scholars from a number of different literacy perspectives have proposed modifications to Rosenblatt's continuum (Paulson & Armstrong, 2010, p. 87). The proposed modifications include reconsiderations of either the efferent or the aesthetic stance or a redesigned model with three or four stances rather than just the two identified by Rosenblatt. McLaughlin and DeVogd (2004b), for example, have attempted to insert a "critical stance" (p. 52) into the efferent-aesthetic continuum. I would argue, however, that efferent and aesthetic reading experiences are so intertwined that they are inseparable in the context of critical literacies, and the notion of reading for social change is not represented within the continuum. Thus, rather than inserting a

stance, it might be more productive to dismantle the continuum and to consider an alternative construct, such as the proposed critical literacies construct, which encapsulates what reading might entail. The goal of critical literacies is for texts to provoke thought in a way that can result in action that can lead to positive social change (Cervetti, Pardales, & Damico, 2001; Gounari, 2009; McDaniel, 2004). Reading must not only be an efferent experience but also an aesthetic experience of investment and conscious engagement with a text, if it is to provoke ‘empathetic responses’ (Louie, 2005) and “foster feelings of humanity and greater sensitivity toward others” (Connell, 2000, p. 33). Both the emotional and the intellectual awake at once while reading, which are experiential aspects of critical literacies.

Empathy “focuses on the perception of affective states and is defined as the capacity to recognize, comprehend, and reexperience another person’s emotions” (Nelzek, Feist, Wilson, & Plesko, 2001, p. 403). It is the product of a concern for wanting to help (Declerk & Bogaert, 2008) and of caring (see Wolk, 2009). In their discussion of new literacies, ethics, and fictional identities in digital spaces, Luce-Kapler, Sumara, and Iftody (2010) associate empathy with a process of identifying with others and “dissolving of one’s own ego” (p. 540). The goal of an empathic interpretation is “clarification, elucidation and understanding” and the ‘amplification of meaning’ (Wilig, 2014, p. 139). The phrase ‘walking in someone else’s shoes’ (Clarke & Whitney, 2009) parallels what it means to read empathetically. One of the critiques of empathetic readings is a construction of identities that are simply easier for a reader to work with due to “sameness” or “fit” (Lather, 2000, p. 190) though, which can be the result of seeking resonance with a reader’s own experiences and current understandings. Meaning making is always partial and selective though, and each reader’s experience of a text will be unique based on how they experience a text. Rather than searching for “originary and correct meanings” (St. Pierre, 2001, p. 150, as cited in Honan, 2004, p. 268) within a text, St. Pierre, for instance, focuses on “the multiplicity of the effects” (p. 268) of a text, which is part of experiencing a text. Throughout data analysis, I focused on what I could learn by engaging with the diversity of texts the participants composed and contributed to the study.

Meaning-making process: Thinking through writing. Writing and composing texts was an essential practice during the data analysis process. I engaged in various forms of transcribing, describing, coding, painting, and creating collage pages throughout the data analysis process, which made it possible for me to think through the data in different ways. Writing about the arts

and research, Eisner emphasizes that form influences content (see Eisner, 2002a, p. 8, 2002b, p. 11). According to Eisner (1986/2005), “The *work of art* is to make expressive form become a source of surprise, a discovery, a form that embodies a conception not held at the outset” (p. 79). The multiple writing methods used were opportunities to learn something new that was perhaps not realized through a previous practice. Gunel, Hand, and Prain (2007) and Fry and Villagomez (2012) have described ‘writing to learn’ as a specific pedagogical approach. Richardson (1994) also values writing as “a *method of inquiry* (p. 516). She explains:

Although we usually think about writing as a mode of ‘telling’ about the social world, writing is not just a mopping-up activity at the end of a research project. Writing is also a way of ‘knowing’ – a method of discovery and analysis. By writing in different ways, we discover new aspects of our topic and our relationship to it. Form and content are inseparable. (p. 516)

I approached each of the writing practices used throughout the data analysis process as though it were a freewriting activity (Elbow, 1989, 1998). Freewriting provides a space to not have to worry about structuring ideas that have yet to be formed or realized. This part of the data analysis process is a sort of blueprinting where rough notes or sketches are scratched for later reference. This was a way of taking note of, and making concrete, initial observations and wonderings. With these initial written compositions, it is as though there is a field of statues to mark moments of thought, and all of the open spaces represent the unsculpted content or what remains unmapped. If considered a bit more linearly and chronologically, it is as though a disconnected and fragmented path is constructed with many missing stones that are either lost or missed in the construction phase. Hope’s (2008) explanation of how drawings can be considered as “place-markers” (p. 1) mirrors this thinking. She explains that drawings

act as an anchor for evolving thoughts as they move towards a partially perceived end. These are staging posts on a journey of discovery as each idea unfolds into an externalized record of a blurry inner image as it gradually comes into focus. Drawings may be waymarkers on a journey towards understanding or resolution of a problem. Drawings may be springboards, place-markings, thought-holders, dynamic, evolving, informing and developing thinking. (Hope, 2008, p. 1)

Throughout the data analysis process, I was able to experience and observe how the forms through which I was composing and representing my analytical readings of the data were having an impact of what I seemed to be focusing on and representing as an idea. Moving recursively through analysis and representation creates these opportunities for learning about the research. Collectively, the interpretive stances and practices presented in this section, which highlight what

it means to transact with texts, to read empathetically, and to think through writing, constitute the foundation of the multimodal data analysis presented in the sections that follow.

Multimodal Data Analysis. The multimodal data analysis process designed and used to conduct this inquiry illustrates how meaning can be made across various modes within an artefact, as well as how different communicative or representational modes from multiple artefacts, can be read in a sort of intermediary analytical space. Multimodal data analysis requires understanding “how discrete sign systems or individual modes articulate and represent meaning potentials, and it also requires understanding “how meaning is constructed as these sign systems interact with one another (O’Halloran, 2004)” (Serafini, 2014, p. 45). One of the data analysis challenges for this study was discovering how “the data sets captured in different media ‘speak’ to each other” (Flewitt, 2011, p. 296). The concept of “transmediation” (Albers, Holbrook, & Harste, 2010, p. 167) has been used in media literacy studies to describe how “to follow the flow of stories and information across multiple modalities” (Choo, 2010, p. 169). Serafini (2011), Daly and Unsworth (2011), and Unsworth and Cléirigh (2014) highlight relationships between language and images in particular in their work.

Just as multiple data collection methods were used, multiple data analysis methods made it possible to work with the data in different ways. The benefit of using and “[m]ixing” (Bagnoli, 2009, p. 568) multiple data analysis methods is that a researcher can attempt to “see things from different perspectives and to look at data in creative ways” (p. 568). With multiple data analysis methods it becomes possible “to test and to validate any emerging interpretation through recurrence across multiple sources” (Bagnoli, 2009, p. 568). Although it might not always be possible to find recurrence or repetition across readings, when apparent, these moments can help build confidence in particular readings of the data. Instances of unverified learning can be contextualized in relation to their peculiarity. The multimodal data analysis process is presented in the sections that follow in terms of how I (a) constructed characters, (b) read and rewrote the interviews and conversations, (c) read the print-based artefacts, (d) categorized the data using thematic coding, (e) performed a multiple case study with cross-case analysis, (f) analyzed individual cases, and (g) analyzed multiple cases.

Creating the characters. For this study, data are being organized, analyzed, and represented according to cases. Each participant is being represented as a case, and each participant is also being identified by a unique visual image to help give a visual identity to each case. Figure 12

presents the ten characters. In addition to the visual identities, pseudonyms are used to identify each individual as a character. Although I created the characters post-data collection, and as part of the data analysis and data representation processes, the participants had an opportunity to participate in the construction of their identity as it would be reported through the study by self-selecting pseudonyms. Pseudonyms that were self-selected by the participants are indicated by an asterisk in Figure 12. Two participants provided a first name and a second name. This model has been applied to all of the characters for consistency. For the cases where the participants either did not provide a pseudonym or wrote their own name, I selected pseudonyms.

The Characters



Figure 12. The Characters

Creating and using characters was at once an analytical strategy and also a representational choice. I created characters following initial readings of the data to not only help distinguish between the cases but also to give life to the stories that were being shared in a unique way. The development of characters, the masking of contexts, as well as the careful selection of data are all important considerations for qualitative research. Chilton (2013) notes that there are unique ethical considerations to consider when disseminating different types of data. Working with rich or thick descriptions and attempting to build cases in such a way that they can evoke readers' thinking and become memorable means that "lives become audible, visible, felt by them [i.e., the readers], in visceral and potentially lasting ways" (Sinding, Gray, & Nisker, 2008, p. 465, as cited in Chilton, 2013, p. 460). Drawing on the work of Eisner (1997), my intention was "illuminating the educational worlds we wish to understand" (p. 4), and to do so through unique representational choices that acknowledge, and even emphasize, the performativity of these created texts. The creation of the characters serves to highlight the potential disconnect that might exist between the individual, the individual as a participant in this study, and my readings and construction of each case. Data analysis is a meaning-making process, and, as such, the characters are intended to stand as a reminder that a life is being storied and selectively presented. The cases presented in this study are collaboratively constructed based on both contributions by the participants and my readings and representations of the data. The stories, expressions, playfulness, and humour shared by the participants engaging in this project breathe life into the characters and give each character a unique voice and energy. Stake (1995), Denzin and Lincoln (2008), Galman (2009), and Leavy (2009) explain that research is an art and researchers craft a study. According to Leavy (2009), "[q]ualitative researchers do not simply gather and write; they *compose, orchestrate, and weave*" (p. 10).

Reading and rewriting the data: Transcribing and describing the aural conversations. As part of the analysis process, I translated the aural data into a written text. Flewitt, Hampel, Hauck, and Lancaster (2014) describe this as a process of "transduction" (p. 52), whereby one mode is translated into another mode, which results in changes to the way the data are represented. In addition to transcribing the participants' verbal contributions that were expressed in words, the 'um's, 'ah's, and other verbal cues or "utterances" (Roulston, 2014, p. 299), as well as gestures, including nodding or pointing to an artefact, were noted. Adding these types of observations to the transcriptions aligns with "discourse analysis" or "conversation analysis"

(Flewitt et al., 2014, p. 51). Hesse-Biber and Leavy (2011) note the importance of listening for the moments of hesitation, pausing, and questioning, since these are often the “very moments where standard vocabulary is inadequate” (p. 304). These are potentially the moments where ‘dominant discourses’ (Hesse-Biber & Leavy, 2011, p. 303) might be limiting. To distinguish the insertions I was making in the transcriptions, I used square brackets as part of my “notation” style (Kowal & O’Connell, 2014, p. 68). I also used symbolic text, such as ellipses, to indicate what I perceived to be a pause or an incomplete thought and hyphens to indicate an abrupt shift in thinking or a change in phrasing. Instances of some of these transcription choices are visible when the findings are presented in the chapters that follow. For the graffiti walls, I used the video recordings to create charts noting which participant contributed which item and in which order. These examples of converting aural data to written text and recording the sequence of contributions to the walls illustrate two instances where print-based forms of data, and written texts in particular, were privileged during the data analysis process.

Reading and making meaning of print-based artefacts. Print-based artefacts were analyzed by (a) attending to the co-construction of data, (b) engaging with graphic elicitation and analyzing textual features, and (c) contextualizing readings in terms of multiple artefacts.

Attending to the co-construction of data. Both the researcher and the participants participate in the co-construction of the data; thus, throughout the analysis process, I remained mindful of how the data collection process was structured and what opportunities were made available to the participants. I also considered the different ‘interviewer moves’ (Freebody, 2003, p. 148) that I was making during the data collection process. For instance, I considered how questions were phrased and what opportunities might have been, or might not have been, afforded to the participants to clarify and/or to elaborate on their thinking. I also considered the moves made by the participants when they phrased their responses, redirected discussions, and/or asked questions. Gudmundsdottir (1996), Rhodes (2000), Dowling (2006), Esin, Fathi, and Squire (2014), and Rapley (2014) all emphasize the context in which interview data are produced and the importance of considering how the co-construction of data by both researcher and participants occurs. Kendrick and McKay (2009), writing about analyzing children’s drawings, highlight the importance of considering how meaning is made at three interrelated sites, including the production site, the image site, and the viewing site (pp. 67-68). Prosser and Schwartz (2004) and Holm (2008a) similarly suggest that there is value in recognizing the

relationships between a photographer, a photograph, a research context, and a researcher reading the photograph. Serafini (2010, 2014) and Choo (2010) also each propose a framework for analyzing visual and multimodal data that includes considerations of both the contexts in which texts are composed and the contexts in which texts are read and analyzed.

Engaging in graphic elicitation and analyzing textual features. The concept of graphic elicitation was introduced in a previous section on data collection methods focusing in particular on the experience of the participant (see Bagnoli, 2009; Crilly et al., 2006; E. F. Smith et al., 2012). Graphic elicitation is also a productive way of understanding how a researcher might engage with data that can be read as a visual and/or multimodal text as well (see Harper, 2003; van Leeuwen & Jewitt, 2001). For this study, this means engaging with the textual features and the design elements of the communicative and expressive modes used by the participants. Working with multimodal data requires the researcher, as a reader and an analyst, to consider what Choo (2010) refers to as the “Aesthetic Design” (p. 168) of a text. Analyzing the print-based artefacts for this study meant attending to and considering the use of perspective, layout or placement, colours, mixed media, images, and/or written words or language(s), which together constitute the content of the text. Analysis for this study included reading the textual features of artefacts produced through photography (e.g., the angles, the framing, the light, the focus (as in perspective and/or distortion), the omissions, the zoom, and/or the location), journaling (e.g., the layout, the margins, the font, the colour, the contrast, the use of language/rhetoric, and/or the choice of materials), and graffiti-ing walls (e.g., the texture, the intertextuality, the layering, the words being used, the symbols, and/or the construction process). Abilock (2008) outlines the following list of questions to help guide a reading of a photograph: “1. What do I see?; 2. What does it mean to me?; 3. What in the photograph leads me to say this?; 4. Why was this photograph created?; 5. What does it mean?” (p. 7). Collier (2001), Goldstein (2007), Pauwels (2011), and Hook and Glaveanu (2013) also present multi-phase visual analysis processes, which include attending to textual features to reflect on how meaning is being made. Hook and Glaveanu (2013) encourage readers “to interrogate what they [i.e., the images] ‘do’ instead of focussing on what they contain” (p. 355). Their focus is on how images, or visual texts, “impact upon their audiences” (p. 355). This type of analysis privileges the creator, composer, and designer as a powerful communicator who has created a product of value. Hook and Glaveanu (2013) draw attention to the effectiveness and the “*rhetorical efficacy*” (p. 356) of images. The

notion of “images as active” (Hook & Glaveanu, 2013, p. 356) could be understood as suggesting that the creator or composer is what Kress and van Leeuwen (2006) would see as a designer, which is a creator that creates a text with an understanding of genres, rhetorical devices, compositional elements, and potential audiences for a text. Through this lens, participants can be considered to act with intention and in performative ways to evoke responses and to knowingly try to guide the research and the learning of the researcher in particular directions. Part of the meaning-making process for this study, thus, involved considerations of how aspects of the artefacts might “have been deliberately arranged by the author” (Choo, 2010, p. 169) in an attempt to express and communicate thinking.

When reading texts with a considerable amount of visual data, it can be challenging to become confident in one’s reading of a text. Drawing from Antoine de Saint-Exupéry’s *The Little Prince* (1943/1971), Narey (2009) shared a child’s drawing of a boa constrictor digesting an elephant with her students who were pre-service teachers, and speculation as to what the image might be included ‘a hill, a snail, melting ice cream, and a hat’ (p. 230). Narey wondered, “How might I bring my students to become teachers who are able to see boa constrictors digesting elephants instead of [seeing] hats?” (p. 230), which is how the drawing is interpreted by the adults in the story. The issue, according to Narey (2009), is that “The adults in de Saint-Exupéry’s (1943/1971) story accept their initial perceptions without scrutiny, and thus fail to recognize the child’s drawing as the visual traces of his critical thinking and problem solving” (p. 4). The child, who had just learned that “[b]oa constrictors swallow their prey whole, without chewing it” (de Saint-Exupéry, 1943/1971, as cited in Narey, 2009, p. 229), was working through the process of figuring out what a boa constrictor might look like after eating. The child in the story even drew the boa constrictor a second time with the inside of the boa constrictor and the elephant’s outline now visible “so that the grown-ups could see it clearly” (de Saint-Exupéry, 1943/1971, as cited in Narey, 2009, p. 229). Narey’s reflection highlights the importance of pausing and critically reflecting when reading rather than making “hasty judgements” (Narey, 2009, p. 231) or dismissing a text altogether if it seems irrelevant or ancillary to one’s interests. Reading critically is about seeing more than “what we expect to see (Bolman & Deal, 1991)” (Narey, 2009, p. 231). The participants in this study were designing and contributing artefacts with the intention that they would be communicating their thinking related to literacies and the literacy test. My goal was to read and re-read all texts carefully to try my best to make meaning

of the diverse texts that were crafted with expressive intentions. Working with multiple representations makes it possible to practice re-reading the data through different expressive moments.

Contextualizing readings in terms of multiple artefacts. Researchers using photo elicitation strategies frequently dismiss the “words-alone” (E. F. Smith et al., 2012, p. 381) interview as being an insufficient process for eliciting understandings and accounts of experiences; however, many researchers suggest working with accompanying interpretive narratives produced by participants when analyzing participant-produced drawings or photographs (see Carlsson, 2001; Clark-Ibáñez, 2004; Holm, 2008b; Kearney & Hyle, 2004; Kendrick & McKay, 2009; E. F. Smith et al., 2012; Van Auken et al., 2010). In a review of studies that included participant-produced drawings, Ganesh (2011) observed that participant-produced drawings were often included “as a part of a larger data collection strategy” (p. 221). Having the option to layer multiple artefacts and to read across an array of narratives was one of the objectives of the data collection process for this study. O’Donoghue (2009), Barone (2008b), and Irwin (2004) each illustrate that narratives can be an alternative mode of communication that can support an art installation, for example, or any artefact in productive ways.

Kearney and Hyle (2004), Literat (2013), Kendrick and McKay (2009), and Bessette (2008) all provide examples in their research demonstrating the benefits of having accompanying narratives when working with and attempting to analyze participant-produced drawings or photographs. Kearney and Hyle (2004), reflecting on their study, which asked participants who were faculty and administrators at a “technology training school” (p. 363) to draw their experience of change in the organization, observed that in one instance where a participant drew “a flock of birds in flight” (p. 377) even the “participant herself noted that this part of her drawing might easily be misinterpreted” (p. 377). According to Kearney and Hyle (2004):

In explaining the birds, the participant said, ‘You would probably think of this as serene. No! I hate to fly . . . It scares me to death . . . But that’s my feeling of insecurity.’ To fully understand the meaning of her drawing, further explanation about her personal fears was needed from the participant herself. (p. 377)

Literat (2013) refers to the work of Freire illustrating a similar instance where a photograph could convey a powerful and unique experience; however, without contextual knowledge, the potential meaning of the visual work might eclipse a researcher’s ability to make sense of the photograph, and in their study of children’s in- and out-of-school literacy experiences, Kendrick

and McKay (2009) asked students to write a description on the back of the sheet of paper that they had drawn on, or, for the younger children, to “dictate” (p. 57) to one of the researchers who would write the description of the drawing. This practice is similar to Bessette’s (2008) example of a professor who presented a novel approach for course evaluations where students were asked to draw a visual image of what they think of when they think of their course experiences, including the teacher, themselves, and other relevant details, and to write a description of the drawing on the back of the sheet. Students were also asked to specify what information the drawing provides that is unique in contrast to what they were able to report through the traditional course evaluation, which was scantron-based (Bessette, 2008, p. 1379). In each of these examples, researchers saw value in giving participants an opportunity to discuss or represent their thinking through an additional mode and medium whether it be spoken or written communication. The request to identify what had been uniquely expressed through the drawing even calls for metacognitive awareness of how diverse text forms might present alternative opportunities for communicating one’s thinking. Asking students to describe their drawings as well as to reflect and comment on what is uniquely being represented challenges the composer of the text to momentarily adopt an alternative perspective, namely that of a reader, to consider how text features might work to potentially communicate meaning.

Although researchers point out instances where supplemental narratives helped when reading a drawing or photograph, it is unclear how these researchers would have proceeded without the accompanying narratives, and whether or not the researchers might have been able to make meaning that was relevant to their studies in unique and powerful ways without the accompanying narratives. It seemed as though the artefacts in question frequently remained unexamined and underutilized for fear of ‘misinterpreting’ (Kearney & Hyle, 2004, p. 377) the artefacts. For Kearney and Hyle (2009), achieving “accuracy” (p. 361) was important. When analyzing participant-produced drawings, Kendrick and McKay (2009) even created a category for “‘unknown’ images of literacy” (p. 61) when they were unsure how to read and make meaning without additional narratives and contextual information. Daly and Unsworth (2011) found that abstractions, technical content, and the need to make inferences seemed to increase the complexity of reading images on a standardized test used to assess children’s reading comprehension of multimodal texts. The images that appeared to be more “naturalistic,” “commonsense everyday,” or directly or explicitly “represented” (p. 67) seemed easier to relate

to text. Based on Daly and Unsworth's findings, it is possible that some artefacts might appear to be easier to read and understand for a researcher than others if there are fewer abstractions, from the point of view of the researcher, or more "explicit" (p. 68) and "direct" (p. 67) efforts made to communicate something. Eisner (1997), however, introduces the notion of "productive ambiguity" (p. 8) when reflecting on what alternative forms of data representation can offer, and he even suggests that a research text that is "more evocative than denotative [. . .] generates insight and invites attention to complexity" (p. 8).

I anticipated the challenge of reading visual data by offering the participants the opportunity to contribute multiple diverse artefacts to the study. The participants also had opportunities to comment on the artefacts they were contributing to the study. These narratives were helpful in understanding how the participants might approach discussing their contributions. Even though accompanying narratives are valuable, these additional narratives are also simply additional narratives that are being read and analyzed. For this study, different modes of expression are also understood to potentially represent knowledges and understandings in different ways. Part of the rationale for using and making available multiple modes and multimodal opportunities is the recognition that there might be some understandings and/or experiences that might not be able to "be considered, manipulated, or communicated by words alone" (Hope, 2008, p. 5). Requiring a verbal or written translation privileges some modes of communication and representation over others. For this study, each multimodal experience provides a participant with a unique opportunity to engage with the study in a way that might not be paralleled through any other occasion. Requiring that everything that is communicated through one mode be echoed through another mode defeats the potential benefits of using multiple methods. Although I was seeking overlapping content as a way to clarify some of my readings, I was not only valuing the instances of data where there was overlap or resonance across modes and mediums. Unique fragments were also appreciated. I agree with Eisner's (1991) remark that "the forms through which humans represent their conception of the world have a major influence on what they are able to say about it" (p. 7). Eisner (1986/2005) explains, "Some forms of representation can illuminate some aspects of the world that others cannot" (p. 79).

Verification of meaning is never-ending. There is always more to know and more to know differently. Recognizing that reflections are based on texts that were composed in particular contexts situates the partiality of readings of the data. The value in making opportunities

available where the participants could re-present or expand on their thinking was that there were additional opportunities to enrich the data and an increasing number of opportunities to read across multiple artefacts. Working with visual data and print-based artefacts requires a researcher to be humble in their readings and to be aware that the interpretations and analysis work presented is but one reading of a text and that there are other possible readings as well.

Categorizing data with thematic coding. Another method through which I practiced reading and analyzing the data was with the use of thematic coding practices. Coding is an organizational practice whereby a researcher can assign a symbol, colour, word, or short phrase, for example, to part of a text to highlight something about the text. I used coding as a note-taking system where I could indicate when I observed a connection between the data and the research questions. Longhofer, Floersch, and Hoy (2012) write, “When you code you are essentially reducing a chunk of data to a few words” (p. 50). The goal of coding is often to make it possible for a researcher to work with a more manageable set of represented ideas. When working with data thematically, the focus of coding is on cumulatively identifying connections within and across cases. Thematic analysis (see Longhofer et al., 2012) involves looking for ‘patterned response’ (Braun & Clark, 2008, p. 82, as cited in Longhofer et al., 2012, p. 48), which can be identified and clustered under a theme. Thematic coding enabled me to see the data differently based on the collections of data that were being assembled.

The thematic coding practices used for this study parallel qualitative content analysis practices (see Berg, 2001; Elo & Kyngäs, 2008; Graneim & Lundman, 2004; Hoffman, Wilson, Martínez, & Sailors, 2011; Hsieh & Shannon, 2005; Kolhbach, 2006; Mayring, 2000; Schreier, 2014; Stemler, 2001). Qualitative content analysis has been described as a “classification” (Hsieh & Shannon, 2005, p. 1278) or data organization process that focuses on “identifying themes or patterns” (p. 1278). Content analysis can focus on content that might be considered to be “manifest” (Berg, 2001; Elo et al., 2014) and explicitly evident (i.e., “those elements that are physically present and countable” (Berg, 2001, p. 242)) or “latent” (Berg, 2001; Kolhbach, 2006; Stemler, 2001), meaning potential, implicit, suggestive, or symbolic of something. For this study, data were often multi-coded to indicate when particular data related to multiple lines of inquiry. Additional codes were also added throughout the reading process. Different coding practices were used to suit the different types of artefacts. In the sections that follow, I describe how I coded conversations and interviews, and then how I coded other artefacts.

Coding interviews and conversations. For this study, coding the transcripts, which represented the conversations and interview data, was a systematic process. I conducted the thematic coding as follows: (1) Transcripts were uploaded to NVivo 10, which is a qualitative data analysis software, and they were labelled and organized; (2) A list of preliminary codes was established based on the research questions, and the coding scheme was created; (3) Texts were read and codes were applied; (4) Newly emergent codes were added to the coding scheme when there was no appropriate code to assign to data yet I felt the data was related to the research questions; (5) Notes were taken to help define the codes and to help ensure the codes were being used consistently, which formed a sort of codebook that served as a reference guide. Emergent thinking about the study, including process notes about the data analysis procedures and considerations about how I might later work with the coded data, were also noted. For instance, I noted when two codes could be compared with one another; (6) Emergent codes were added to the coding structure, and I began to use them moving forward. Previously coded transcripts were revisited and re-coded when the data seemed to relate to the newly added codes; and (7) A review of the coding process was completed and modifications were made to the coding.

I balanced both a top-down and a bottom-up approach for coding the transcripts. I began by creating initial codes based on the research questions, since the research questions informed the interview questions used during the study. Since these codes were quite general (e.g., Understandings of Literacies and Critical Literacies, Experiences with Literacies and Critical Literacies (and Influences)), many sub-codes were added, which outlined themes that emerged from the data. Whereas the pre-determined codes were quite general and category-based, there was a level of specificity to the emergent codes that highlighted the interests, the questions, and the experiences the participants were sharing. The emergent codes were added throughout the analysis process to better represent the participants' contributions to the study. The codes and the list of sub-codes that were used are presented in Table 17 and Table 18. Codes were also created for each of the data sources and each of the participants such that searches could be performed that would compile all content coded in relation to a specific case, activity, and/or topic. Demographic information shared by the participants was also coded, which included information about schools, grades, English language background, interests, and extracurricular or community involvement, which was used to create a profile for each participant.

Table 17. *Coding Scheme: Coding Categories 0-3*

0. Data Sources	1. Understandings of Literacies and Critical Literacies	2. Experiences With Literacies and Critical Literacies (Influences)	3. Value of Literacy Skills
• Graffiti Walls • Photography • Journaling • Handouts • OSSLT Test Items • Words in a Bag	• Defining Literacies: Reading • Defining Literacies: Writing • Defining Literacies: Speaking • Defining Literacies: Languages • Defining Literacies: Communication • Defining Literacies: Viewing • Defining Literacies: Media • Defining Literacies: Images/Visuals • Defining Literacies: Actions/Physical • Defining Literacies: World • Defining Literacies: Interdisciplinarity • Defining Literacies: Don't Know/Lack of Understanding • Defining Literacies: Critical Literacies • My Observation: Literacies Generally • My Observation: Critical Literacies • Metacognition (Language and Awareness) • Questions About Literacies	• At School (Extracurriculars) • In Class: English • In Class: Other Subjects • At Home • In the Community • With Peers • At Work • Assessing Your Literacy Skills (How) • Saying What Teachers' Want to Hear	• Valuing Skills • Plans and Desire to Improve; Skill Development • Future Education Plans • Future Employment Goals • Career and Literacies

Table 18. *Coding Scheme: Coding Categories 4-7*

4. Experiences With the Test	5. Perceptions of the Influence of the Test	6. Other Codes	7. Case Information
• Knowledge About the OSSLT • Purpose of the Test • Test's Evaluation Criteria • Test Preparation: Info • Test Preparation: Practice • Writing the Test • Reflections on Test Format • Reflections on Testing Process • Reflections on Test Content • Redesigning the OSSLT • Thoughts and Feelings About the Test; Value of the Test • Right Answers; Limited/No Choice or Critical Space • OSSLT vs. English Marks • Questions About the Test • Comments About OSSLC	• Receiving Test Results • Interpreting Results; Literate • Accurate Representation of Skills? • Learning From OSSLT • Learning From OSSLT Prep • Influence on Self-Image; Stigma • Pressure to Pass; Fears • Influence on Future Plans and Goals; Graduation • Influence on Relationship/ Experiences With Literacies • Influence on Classroom Environment: English • Influence on Classroom Environment: Other Subjects • Other Consequences	• Student Engagement With Education • Interest in the Research/Why Participating • Moments of Resistance/ Divergence (Research, Literacies) • Inconsistencies With Other Statements • Comments on the Arts/Methods • Future of Literacy Assessment	• Demographic Info: Case 1 • Demographic Info: Case 2 • Demographic Info: Case 3 • Demographic Info: Case 4 • Demographic Info: Case 5 • Demographic Info: Case 6 • Demographic Info: Case 7 • Demographic Info: Case 8 • Demographic Info: Case 9 • Demographic Info: Case 10

The critical awareness with which I approached coding helped me reduce the risk of losing the “craft” (James, 2013, p. 564) of interpretive work or becoming a “mere technician” (p. 564). I recognize that qualitative data analysis software can influence how researchers ‘conceptualize’ and ‘navigate’ analysis (Gibbs, 2014, p. 278). There is a growing body of research on the use of qualitative data analysis software, such as NVivo (see Auld et al., 2007; Bassett, 2011; Bazeley & Jackson, 2013; Bergin, 2011; Evers, 2011; Gibbs, 2014; Ozkan, 2004; Silver & Patashnick,

2011). Bergin (2011) raises concerns about “creating a ‘Frankenstein’s monster’” (p. 6), which perhaps suggests that if the researcher works with the data in a decontextualized and piecemeal fashion, the outcome of the research is likely to be limited and potentially even flawed. As many of the scholars listed above highlight, the outcomes of analysis will depend in large part on how the researcher chooses to work with the data analysis software. St. Pierre (2011) is quite critical of coding practices and encourages students to not code their data for fear that they “never do the theoretical analysis they could. Their findings are pedestrian, and they produce low-level, insignificant themes; untheorized stories; or extended descriptions that do not get to the intellectual problem of explaining why things are as they are” (pp. 621-622). The coding practices used for the interview and conversation transcripts would fall short were they the sole analytical practice used for this study. The majority of the data analysis work that produced noteworthy contributions to the findings occurred at a distance from the data and when working through other stages of the writing. The use of coding practices to differently categorize and represent data aligns with my understanding of what it means to think through writing though. Through coding, I was able to differently represent texts by labelling, organizing, and extracting segments for continued re-readings.

Coding other artefacts. Although more than just the transcripts could have been analyzed using NVivo, I worked with the photographs, journal pages, graffiti walls, and handouts independently from the software. I still used coding practices when working with these other data types (1) to develop a collective literacies construct that represents how the participants were defining literacies as a concept, (2) to categorize and arrange photographs into collections, and (3) to organize content for case profiles and portrait pages. Despite the limitations of coding, qualitative content analysis has frequently been referred to as a recognized and accepted way to engage with visual data (see Sharples, Davison, Thomas, & Rudman, 2012).

When working through the research question focused on how students were understanding and conceptualizing literacies, I read the transcripts, as well as the handouts, journal pages, and any artefacts where I believed words in particular were used to convey an understanding of the term or concept ‘literacies.’ These ideas were arranged on a page grouping similar comments. This became the collective literacies construct, which is presented in Chapter 7 to represent how the full set of participants seemed to be understanding literacies. This exercise in meaning

making parallels Mayring's (2003) presentation of three content analysis practices: "summary," "explication," and "structuring" (as cited in Kohlbacher, 2006, para. 56).

When working with the photographs, I attempted to identify what was visible in each photograph and how that visual content might relate to the study. To mitigate overextending my readings without contextual support, I continuously reminded myself of the purpose of the activity, what the participants were invited to do, and of any comments they shared about this activity. This activity invited the participants to capture examples of what they considered to be literacies. Goldstein (2007) argues, "it is always a useful exercise to question the intent of the photographer in creating content" (p. 79). Hook and Glaveanu (2013) draw on semiotics to explain how the "multiple layers of meaning within every image" (p. 359) can be investigated by "tracing the overlapping registers of denotation (what is depicted) and connotation (what is expressed through what is being depicted) (see Penn 2000; Rose 2001; van Leeuwen 2001)" (p. 359). While the content of what was captured was noted, the potential significance of that content for a particular participant was considered by reading multiple artefacts. Bock, Isermann, and Knieper (2011) explain that visual images are "ambiguous and polysemic" (p. 10); thus, contextualizing coding of the data in terms of readings of multiple artefacts was productive.

When preparing content for the case profiles and portrait pages, a form of content analysis was used to help divide artefacts into two categories to align the organization of the data with the research questions. One of the central lines of questioning focuses on literacies and the other focuses on the OSSLT; thus, these were the two categories used. The focus of this type of analysis was on considering the questioning rather than the contributions of the participants, similar to the pre-determined coding practices used for the first reading of the transcribed data. In order to work with the most complete collection of data possible when creating the case profiles and portraits, selections from the transcripts were also similarly re-categorized.

Multiple case study and cross-case analyses. Yin (2014) notes, "The analysis of case study evidence is one of the least developed aspects of doing case studies" (p. 133). Instead of particular procedures though, Yin (2014) recommends developing an "analytic strategy" (p. 135). This section presents the "analytic strategy" (Yin, 2014, p. 135) of continuously zooming in and out that I used when working with multiple cases. This strategy focuses on contextualization, which is essential for case study research. Through zooming, it is possible to read both within and across contexts. The following are three examples of textual decomposition

and recomposition that researchers have provided in their work on the arts and literacy that are useful for illustrating what zooming in and out can look like. Narey (2009) referred to de Saint-Exupéry's tale of a child drawing and re-drawing a boa constrictor to challenge readers to consider more than just their first impressions when making meaning of a text. Clarke and Whitney (2009) presented an example of a literacy activity that involved cutting an image into multiple squares that can each independently inspire a new drawing that will likely differ from the original image to emphasize how reading from multiple perspectives and within different contexts differs. Franzak (2006) referred to Istavan Banyai's (1995) book, *Zoom*, which, with each turn of the page, presents a zooming out from a painting until there is a white dot surrounded by darkness, to highlight the significance of context. In each of these examples of reading and re-reading texts, layering multiple texts and perspectives whenever possible was shown to enhance meaning making possibilities. While reading the data for this study, I often began with one artefact and then I layered readings of additional artefacts onto my reading, which is comparable to the boa constrictor example. I also balanced making sense of one artefact and contextualizing that artefact in terms of all of the data collected for a particular case, which is similar to considering the parts in relation to the whole during the picture activity. I also continuously challenged the focus of my inquiries by moving through different lines of questioning from the specific to the abstract, which is similar to zooming out from a painting. Seeking other examples of research that might have drawn on this strategy of zooming, I found that Pamphilon (1999) also compared her analytical work to zooming in and out, which proved to be an effective way for her to consider the "multiple layers, levels, and relationships that were embedded in a single life history" (p. 407). While Pamphilon (1999) focused on zooming within the intricacies of a single case, for this study, the movement from case to case and between cases is an equally important trajectory to be able to outline.

Analyzing individual cases. Multiple case study requires working extensively with data from each individual case. It is important to spend considerable time analyzing individual cases before 'merging' (Stake, 2006, p. 46) them into a discussion of the findings of a multiple case study. Stake (1995) writes, "We do not study a case primarily to understand other cases. Our first obligation is to understand this one case" (Stake, 1995, p. 4). The ways in which I was reading and analyzing the contributions from each participant parallels Yin's (2014) analytic technique of "explanation building" (p. 147). My analysis focused on identifying instances where each

participant mentioned literacies and/or the OSSLT, and I attempted to understand and to explain the participants' reported understandings and experiences of critical literacies in an educational context that includes a high-stakes literacy test. I also sought to explain how the participants were perceiving the test to be influencing their understandings and their experiences.

In order to work through the wealth of data associated with each case, and in an effort to ensure that readings of each artefact could be readily contextualized in light of other artefacts, I created collage-esque profile and portrait pages. Whereas a profile provides an outline or a silhouette, a portrait fills in the detail and expands on the outline. The portrait pages provided a way to work through a large volume of data, and they were created as a supplement to the profile pages for six of the cases that contributed a wealth of data to the study. Over one hundred pages were created in total. Two sample portrait pages that have been extracted from their collections are presented in Appendix J as an aesthetic demonstration.

Creating collage-esque pages as part of the data analysis process was a productive method for being able to at once zoom in and zoom out from the cases. These pages enabled me to be able to re-read multiple artefacts concurrently due to the physical and visual proximity of the artefacts. The layering of texts and the "*juxtaposition of words and images*" in particular was intended to make it possible to construct meaning differently. Both words (e.g., handout responses, questionnaire item responses, interview data) and visuals (e.g., drawings, sketches, photographs) were used to compose the pages that became, in a multi-sensory sense, at once an echo of a "verbal collage" (Tamplin, 2006, p. 179) and also a visual collage. Denzin and Lincoln (2008) refer to "*montage*" (p. 6), which is a 'cinematic editing' practice that involves 'juxtaposing' and 'superimposing' images (p. 6), to explain how texts are "dialogical" (p. 7). Denzin and Lincoln (2008) also compare the use of "*pentimento*" (p. 6) in painting, blending in jazz music (p. 7), and stitching in quilting (p. 7) to highlight what it means to juxtapose multiple texts to create new opportunities for meaning making. The layering and blending of texts can create "an emotional, gestalt effect" (Denzin & Lincoln, 2008, p. 6). For this inquiry, the fragments of data were intentionally positioned on the pages for storytelling potential much in the same way that fragments are intentionally positioned when creating a collage. D. Davis (2008) highlights how collage can be understood as "an organizing principle" or a "conceptual strategy" (p. 246).

There are many different ways in which collage techniques are conceptualized and used in research contexts:

- Behrend (2001) studied photo collages by Ugandan photographers;
- Takata (2002) used magazine and image-based collage work with students who struggle with school attendance;
- Martin and Olekshen Peters (2005) investigated adolescents' collages about beauty;
- Vaughan (2005) investigated familial relationships through photography and through her work with fabric and layered texts;
- Kostera (2006) proposed storytelling through narrative collages;
- Tamplin (2006) presented a 'Song Collage Technique' that includes repurposing lyrics from existing songs as part of a therapeutic process;
- Norris, Mbokazi, Rorke, Goba, and Mitchell (2007) used collage making to work with Grade 6 students in Africa on HIV/AIDS;
- MacKenzie and Wolf (2012) investigated student teachers' collages reflecting their experiences with teaching;
- Kay (2013) invited participants to create bead collages;
- Chilton and Scotti (2014) considered collage as a method of art therapy; and
- Margolin (2014) worked with university women on sadness, stress, and anxiety through magazine collages.

Most of these examples focus on participants' creation of collages; however, I used collage practices as part of the data analysis process, which is more akin to the work of Holbrook and Pourchier (2014) who used collage practices to seek a better understanding of their data analysis practices, Gerstenblatt (2013) who created collaged portraits of participants, and Gatlin (2012) who composed sketchbooks and layered data while representing the findings of her research. These studies resonate with my understandings that textual composition is part of an analysis and meaning-making process. Engaging with collage practices is a form of "embodied cognition" (Chilton & Scotti, 2014, p. 169) where meaning is made through the act of composing texts. Butler-Kisber (2008) similarly theorizes "collage as inquiry" (p. 265).

In addition to composing the profile and portrait pages, I also wrote narratives that reflected my readings of the pages. The researcher-produced artefacts (i.e., the pages and the narratives) were synthesized into case overviews, which serve as a "case record" (Patton, 2015, p. 537; see also Merriam, 2009, p. 203). A selection of the case overviews is presented in Chapter 6. The case overviews provide a further organization of the cases, much like a "fine weaving" (Patton, 2015, p. 538) that includes the details of each case that are used to inform the findings. Stake (2006) observes that "[p]utting the Assertions together is not like assembling a jigsaw puzzle, for the pieces lack shape" (p. 76). Peshkin (1988) writes about data as 'segments' noting how "[e]ach one is like a piece of a puzzle, but a puzzle for which there is no picture" (p. 423).

According to Peshkin (1988), “the researcher creates both the pieces of the puzzle and the picture that will encompass them” (p. 423).

Analyzing multiple cases. From a multiple case study, readers want, according to Stake (2006), the “understanding of the aggregate” (p. 39). In addition to working with each case in its entirety, I also considered the multiple cases concurrently in light of focused lines of questioning that could enable me to respond to the research questions. Although the “explanation building” (Yin, 2014, p. 147) began at the level of each individual case, the analysis for this multiple case study moved from the individual to the individual within the context of others to be able to respond to the research questions in a way that could be reflective of the multiple cases. The “explanation-building process” is an ‘iterative’ process (Yin, 2014, p. 149) where a developing explanation is proposed and that proposed explanation is continuously reviewed. Reviewing a developing explanation might include mapping the explanation within the context of multiple cases to ensure that the explanation is reflective of the individual cases as well as being reflective of the full collection of multiple cases. Working through a critical literacies lens meant questioning readings of texts to ensure that multiple possible perspectives were considered. Part of designing a multiple case study is also about making decisions about which cases might prove to be most relevant to explaining particular ‘themes’ (Stake, 2006, p. 50) though. For both the multiple case and the cross-case analyses, I was reading with a purpose, and I was using a common lens to filter all of the data. This type of analysis could be understood as a zooming in on the cases from a particular perspective and with a selective and particular interest. By zooming in for this study, the data analysis process was quite systematic, and the data were fully and thoughtfully considered to help ensure a critical output of findings.

Evaluating Research: Assessing Quality

For this study, quality is being judged through the lenses of validity and trustworthiness. I discuss the quality of the research with respect to the following six facets of the research process: (1) the design of the study; (2) the role of the researcher; (3) the construction of the cases and the role of the participants; (4) the interpretation and the analysis of the data; (5) the representation of the research; and (6) the use and value of the research.

Validity and Trustworthiness of the Research. Many qualitative researchers have recontextualized the term *validity* to make it relevant to an assessment of qualitative research (see Cho & Trent, 2006; Dadds, 2008; Eisner, 1997; Flick, 2014; Flynn, 2007; Hein, 2013;

Lather, 1991; 1993, 1986/2003, 2007; Merriam, 2002a, 2009; C. B. Meyer, 2001; Patton, 2015; Richardson, 1994; Scheurich, 1996; Seale, 2004; Stake, 1995, 2006; Yin, 2014). C. B. Meyer (2001, p. 344), Merriam (2002a, p. 24, 2009, p. 221), and Yin (2014, pp. 45-48) refer to more traditional concepts of validity, including references to “internal,” “external,” and/or “construct” validity; however, Lather (1991) refers to “catalytic validity” (p. 68; see also Lather, 1986/2003, p. 191), which Robson and Sumara (2016) use in their research, Dadds (2008) refers to “empathetic validity” (p. 280), Patton (2015) lists “consequential validity” as one of ten “Critical Change Criteria” (p. 681), and Cho and Trent (2006) work with concepts of “transformational validity” and “transactional validity” (p. 321). Playing with language and the idea of portmanteau words, Hein (2013) introduces concepts of “‘valiterity’ (combining validity and alterity) and ‘valiporia’ (combining validity and aporia)” (p. 497) to highlight “the otherness that always haunts validity” (p. 497) and to highlight “the problem of validity as an unresolved paradox, something that is ultimately unanswerable” (p. 497). These researchers each work with a concept of validity in different ways by applying a unique lens onto their work that highlights research priorities and values that range from assessing the soundness of research design structures to assessing the extent to which the research findings can evoke or inspire change. Lincoln and Guba (1985) recognized that even “the most sincere attempts to break with” (Emden & Sandelowski, 1998, p. 208) positivist traditions inevitably remain connected and related to the traditions where validity once aligned with (absolute) truth(s) in some manner.

Many researchers also acknowledge how a discussion of trustworthiness relates to the assessment of the quality of qualitative research (see Cho & Trent, 2006; Horsburgh, 2003; Merriam, 2009; C. B. Meyer, 2001; Patton, 2015; Scheurich, 1996; B. N. Williams & Morrow, 2009). Assessing the trustworthiness of research means considering the relationships that exist between the researcher as writer, the text, and the readers. A judgement of the quality of research can be based on what it means for a reader to be confident that they can learn something from the research and that they can trust what they are learning.

Just as research is conducted based on particular values and is reflective of particular understandings, assessments of the quality of the research are also uniquely positioned based on the values of individuals and/or communities who engage with the research as readers. It is possible to consider that readers who are “viewing qualitative research findings through different paradigmatic lenses will react differently” (Patton, 2015, p. 683). Any assessment of quality is

always value-based. There often seems to be a desire to follow standards or norms though when evaluating research. Criteria used to evaluate research “serve as shorthand” representing “values” (Tracy, 2010, p. 838). The terms that are used in this section to comment on the quality of this study are harmonious with the theoretical and methodological frameworks that guide the research, and they are synonymous with the values that I prioritize. I draw on criteria, qualities, and concepts that are suggested by scholars doing comparable work to establish dialogue across instances of research and to show how this work is informed by best practices and what has been perceived to be effective and indicative of quality according to prominent researchers (e.g., Barone, 2008b; Flick, 2014; Hyett et al., 2014; Lather, 2007; Merriam, 2002a; Patton, 2015; Stake, 2010; Tracy, 2010).

Design of the Study: Performativity. One of the ways in which I have attempted to demonstrate trustworthiness throughout this study is by identifying the design decisions I have made accompanied by justifications. According to Hyett et al. (2014), thoroughly presenting the methodology and methods of a study along with a “rationale for key methodological decisions” (p. 2) is an essential part of demonstrating the “rigour” (p. 2) of the research. Performativity is perhaps the greatest threat to the trustworthiness of research though. Through all representations of the research, including the presentation and the justification of the design of the study, the researcher as a writer/representer performs for readers. For this study, the characters were created, the profile pages were composed, the text was structured, and the lines of argumentation were represented in such a way that they could potentially and intentionally guide a reader to similar conclusions. Other conclusions are always possible though, so I presented the research richly and extensively such that a reader could experience reading and making sense of the data. If a reader is not provided sufficient opportunity to engage with the research, the extent to which the research can ever be trusted will always be limited based on there being insufficient grounds to establish trust. Representations of the research that provide readers with an opportunity to experience the research process, including being able to review samples of how analysis has been performed, are of utmost importance when it comes to mitigating threats of performativity.

Role of the Researcher: Positionality and Reflexivity. In the introduction to this study, I presented my positionality as a researcher, and when presenting the theoretical framework informing this qualitative study, I discussed the significance of both subjectivity and reflexivity. Both positionality and reflexivity (see Cole & Knowles, 2008; Jootun, McGhee, & Marland,

2009; Lather, 1991; Macbeth, 2001; Malterud, 2001; May & Perry, 2014; Mruck & Breuer, 2003; L. Newton, 2009; Patton, 1999, 2015; Pillow, 2003; Scheurich, 1996; Tracy, 2010; B. N. Williams & Morrow, 2009) are commonly regarded as processes that can yield high quality research. Since the researcher is not “a disembodied bystander with the capacity to provide an ‘uncontaminated’ account” (Horsburgh, 2003, p. 308), reflexivity is the process through which a researcher can realize how they are affecting the research. Richardson (1994, p. 517), Cole and Knowles (2008, p. 61), Merriam (2009, p. 214), and Patton (2015, p. 700) all position the researcher as a research instrument. Richardson (1994) criticizes “scientific” and “mechanistic” practices because they require “writers to silence their own voices and to view themselves as contaminants” (p. 517). The role of the researcher is to work through the data and to ‘contaminate’ the document with insights that can only be gleaned from extensive and immersive work with the data. Donmoyer (2009) writes, “case studies allow us to look at the world through the researcher’s eyes and, in the process, to see things we otherwise might not have seen” (p. 63). For Cole and Knowles (2008), one of the “Qualities of Goodness” (p. 65) for arts-informed research is even that the “researcher’s presence is evident” (p. 66). This can be achieved through “an explicit *reflexive self-accounting*” (p. 66), as well as through evidence that the “research text (the representational form) clearly bears the *signature or fingerprint* of the researcher-as-artist” (p. 66). The creativity, the humility, and the interest in learning through which this study has been designed and conducted, and the unique lines of analytical thinking and the metacognitive crafting of the narrative text, are intended to be evidence of my ‘signature’ as a researcher.

Construction of the Cases and the Role of the Participants: Contextualization,

Performativity, and Modified Member-Checking. Tracy (2010) lists using “sufficient, abundant, appropriate, and complex [. . .] context(s)” (p. 840) as one of the ways in which qualitative researchers can achieve “[r]ich rigour” (p. 840) as a criteria that suggests quality. Developing rich and in-depth (Patton, 2015; Stake, 2006; B. N. Williams & Morrow, 2009) case profiles or portraits is an important part of case study research. The case profiles and portraits created for this study, as well as the case overviews presented in Chapter 6, provide focused and situated lenses through which the lines of inquiry shaping this study were filtered by both the participants and the researcher. Not only does the researcher form and make decisions about how a case will take shape, but the participants also engage in performative and constructive practices when sharing their understandings and experiences and when positioning themselves.

Questioning the trustworthiness of the data can include questioning not only the ways in which the researcher engaged with the research but also how the participants engaged as contributors of the data. The data for this study “were specifically made for research purposes” (Bagnoli, 2009, p. 567), and it is possible that the participants “might consciously have tried to project some self-presentation that could match what in their view the researcher was looking for” (p. 567). Given that this study is focused on students’ self-reported understandings and their perceptions of their experiences, the participants’ expressions are being valued as they were presented. The participants were considered to be “unrivalled experts in their own fields” (Cooper as quoted in P. Davis, 2007, p. 170). Through multiple research activities, it becomes possible to observe whether or not what the participants were sharing was at the very least consistent and whether or not the data could be productively used to construct a case study.

Modified versions of ‘member-checking’ (see Lisa Baker, 2006; Cho & Trent, 2006; Crilly et al., 2006; Merriam, 2002a; Patton, 2015; Stake, 1995; Toma, 2006; Zenkov et al., 2012) were also conducted throughout the course of the data collection. Using multiple research activities served as a modified form of member-checking in that clarification processes invited the participants to continue to (re)state, elaborate, and/or expand on their thinking about both literacies and the literacy test. The participants had the opportunity to revisit questions, to rearticulate their thinking across different types of activities, and to contribute multiple narratives. As previously noted in the discussion about using accompanying narratives, asking verbal questions and translating a contribution to an alternative mode is not the only way to clarify someone’s thinking though. Every reading is a re-reading and each re-reading can potentially result in a different re-telling or re-writing of a text at least to some extent. Crilly et al. (2006) are similarly critical of the limitations of member-checking. I recognize and acknowledge that my readings and my analysis of what the participants contributed to this study are not necessarily how the participants would read their own work. My readings highlight particular aspects of their contributions, filtered through particular validity and critical literacies lenses, which were presented in the conceptual and analytical frameworks guiding this study, and it is possible the participants would selectively emphasize different aspects of the artefacts.

Interpretation and Analysis: Triangulation, Crystallization, and Negative Cases. Giving readers the opportunity to understand the processes through which I engaged with the data, as well as a diversity of excerpts of data to work with, is intended to provide readers with an

opportunity to assess the analytical practices and to compare their readings with those I provide. Being able to replicate an interpretation of the data is not necessarily the objective though (Merriam, 2002a, p. 27). One of the challenges of communicating methods and making data available for the reader to work with is acknowledging that each reader might still experience the data differently. Kincheloe et al. (2012) explain the challenges facing researchers who seek confirmation through replication in a discussion about “interresearcher reliability” (p. 24). They note, “Because all observers view an object of inquiry from their own vantage points in the web of reality, no portrait of a social phenomenon is ever exactly the same as another” (p. 24). The proposed critical literacies construct positions each individual as a situated being suggesting that not all literacy engagements will unravel in the same ways, and not all readings of a text will be the same. My goal in supporting the findings with evidence from the data set is to demonstrate at least that “*the results are consistent with the data collected*” (Merriam, 2002a, p. 27).

When I present my analysis of the data, there is no claim to “*interpretive omnipotence*” (Richardson, 1994, p. 520). For postmodernism, “doubt” (Richardson, 1994, p. 517) is the core and ever-present element that reminds us of the partiality of all knowledge being constructed. Rosenblatt (1993), however, suggests that some interpretations of texts are “better than other interpretations” (Rosenblatt, 1993, p. 382). Similarly, in the case of Narey’s (2009) research with pre-service teachers, she argues that some children’s artwork is more effective than the artwork of others due to the fit or appropriateness of the methods used. Narey suggests that art be considered in terms of ‘problem solving’ (p. 234). Discussing how assessment and criticism relate to art education, Narey (2009) writes that while it might be the case “that there is no *one right way*, there are frequently many answers in art that are decidedly better than others” (p. 234). For this study, I show that the methods used for performing the readings of the data are effective for reporting on students’ understandings and experiences of literacies and the OSSLT.

Providing an “audit” trail (Horsburgh, 2003, p. 309) can enhance the trustworthiness of a study. Yin (2014) similarly suggests maintaining a “chain of evidence” (p. 127). The goal is “to allow an external observer – in this situation, the reader of the case study – to follow the derivation of any evidence from initial research questions to ultimate case study conclusions” (p. 127). Vasquez (1999, 2004, 2009) explains how she uses an audit trail of learning in her kindergarten classrooms to outline how the class’ inquiries are progressing. Their audit trail was a map of the “incidents” (Vasquez, 2009, p. 60) that the class was encountering and how they

were engaging with them. It was a space through which learning could be positioned such that it could be reflected upon and critically considered and even returned to. Rather than present an audit trail as a tool for “accountability” (Vasquez, 1999, p. 131), Vasquez considers an audit trail to be “a tool for thinking” (p. 132) and “a tool for critical conversation” (Vasquez, 2009, p. 57). When reviewing the analysis, and re-reading the findings and conclusions presented, it was important for me to be able to attempt to retrace my thought processes and the paths I created while working through and making connections in my understandings of the data. The findings are presented based on the research questions, and with support from the data set, to make the associations between the inquiries and the results of the inquiries clear.

I used the following strategies to challenge and to extend my interpretations and my analysis of the data: triangulation, crystallization, and seeking negative cases. Under a criteria of ‘credibility,’ Tracy (2010) lists both triangulation and crystallization as possible “means, practices, and methods through which to achieve” credibility (p. 840). Triangulation suggests that by studying a few related knowns, and understanding their relationships with an unknown, a researcher can come to know more about the unknown (see Burton, 1998; Farquhar, 2012; Jick, 1979; Patton, 2015; Stake, 1995). Patton (2015) explains:

[T]he term *triangulation* is taken from land surveying. Knowing a single landmark only locates you somewhere along a line in a direction from the landmark, whereas with two landmarks you can take bearings in two directions and locate yourself at their intersection. (p. 661)

Stake (1995) suggests that case studies are about “establish[ing] meaning rather than location, but the approach is the same” (p. 110). Triangulation is an argument at once both for quantity and for quality. Although the focus might appear to be on quantity of sources, triangulation is more so about the quality of resulting interpretations, and how readings of the data can be enhanced and strengthened when consulting multiple data sources and even multiple data types. Triangulation is a practice that aligns well with multi-method and multimodal research. There are multiple ways of triangulating research (see Patton, 2015, p. 661), which might include using multiple methodologies, multiple methods and multiple data sources, multiple analysts, and multiple theoretical and analytical lenses to read and to make sense of the inquiry, the data, and the findings that are being constructed and reported.

The purpose in triangulating research is not to “demonstrate that different data sources or inquiry approaches yield essentially the same result” though (Patton, 2015, p. 661). According to

Patton (2015), “The point is to study and understand when and why differences [in results] appear” (p. 662). Not all methods used in this study are collecting data in the same ways, and, as such, the goal is not only having comparable data. Triangulation is about more than narrowing a focus through repetition of something particular. I used triangulation as a mapping technique, which aligns with its history (see Burton, 1998; Patton, 2015; Stake, 1995). Through the data analysis process, I connected multiple sources of data that all had the potential to contribute towards a developing understanding that aligned with the research questions.

Crystallization is a variation on the notion of triangulation. Richardson (1994) proposed the crystal, rather than the triangle, as the central image for validity for “postmodernist texts” (p. 522). A shift from triangulation to crystallization is based on a recognition “that there are far more than ‘three sides’ from which to approach the world” (Richardson, 1994, p. 522). This is a shift from “plane geometry to light theory, where light can be both waves and particles” (p. 522). The move from the triangle to the crystal is a switch from the focus of a closed shape, where the researcher traces from one point to the next, as though there is a predetermined endpoint to identify, to an object that is multifaceted and known for its reflective properties. Tracing the sides of a triangle gives a sense of closure, whereas the notion of a crystal encourages one to think perhaps of rays of extension. Crystallization highlights the partiality of what can be known from any particular position though emphasizing that readings are always situated. The purpose of consulting “*multiple sources of evidence*” (Yin, 2014, p. 47) is to potentially make possible “convergent lines of inquiry” (Yin, 2014, p. 47). Consulting multiple sources and critically re-reading and reconsidering data in terms of a number of sub-questions was helpful for identifying moments where the data ‘converged’ (Jick, 1979, p. 602; Yin, 2014, p. 47).

When supporting interpretations of the research with excerpts from the data set, Flick (2014) warns of the need for more than an “interweaving of ‘illustrative’ quotations” (p. 480), which is a “procedure” he calls “selective plausibilization” (p. 480). Not all of the participants shared the same understandings or experiences of literacies. To help build the trustworthiness of research, a researcher can demonstrate that they were “receptive to new and surprising data” (C. B. Meyer, 2001, p. 344). Patton (1999) suggests that researchers consider “negative cases” (pp. 1191-11921; see also Patton, 2015, p. 654) to enhance the quality of a study. Creswell (2007) also lists “negative cases” (p. 208) as a ‘validation strategy’ that is “frequently used by qualitative researchers” (p. 207) as a way of working with “negative or disconfirming evidence” (p. 208).

While working with the data, I was conscious of cases, or instances of data within a case, that would challenge my thinking and prompt me to reconsider my developing understandings. There is nothing to say which case is the ‘negative,’ “deviant” (Gibbs, 2007, p. 96, as cited in Patton, 2015, p. 654), or opposing case in particular. It is only when we begin with something that has been developing, and then we encounter a ‘negative case,’ that we see these cases in contrast. It is helpful to read each unique case prior to reading across the cases, since a researcher might not pause at all of the unique intricacies in a case in the same way when focusing on the set.

Representation of the Research: Compelling Research. The ways in which research is both constructed and represented for readers is a significant indicator of the quality of the research. Barone (2008a) suggests that one of the criteria upon which arts-based research could be judged, which relates to how the research is represented, is whether the text is compelling. He asks:

Does the text have the power to lure the reader into that virtual world so that he or she desires to inhabit it at least temporarily? If the work is not attractive in this sense, it is unlikely to achieve its pragmatic purpose of raising questions in the minds of its audience. (Barone, 2008a, p. 31)

Quality arts-informed research has an “*evocative quality* and a high level of *resonance* for diverse audiences” (Cole & Knowles, 2008, p. 67). Research is expected to be able to achieve “verisimilitude” (Toma, 2006, p. 410), which is “telling a story so richly that the reader can feel it” (p. 410). One of the challenges is how “messy” (Pillow, 2003, p. 193) this research can be. This study provides an example and an opportunity to consider what studying the outcomes and the potential consequences of a high-stakes standardized literacy test could look like, including what it means to navigate complex narratives. In order for a reader to have opportunities to question, to critically consider, and to reflect on the findings, I sought to create a text that could be navigated in multiple ways to elicit the interest and critical consciousness of readers. How a reader will engage with a text, and what might interest or move one reader might differ greatly from one reader to the next. Stake (1995) writes though that researchers “have ethical obligations to minimize misrepresentation and misunderstanding” (pp. 108-109). Mitigating misunderstandings of the data is difficult to control. Stake believes that “the researcher has partial responsibility for the validity of the readers’ interpretations” (Stake, 2006, p. 35). According to Stake, “The author needs to repeat key assertions in several ways. He or she needs to give illustrations. He or she will leave some of the work for the readers to do, but should give them the makings of understanding” (Stake, 2006, p. 35). Although I have created spaces where

readers can engage with a selection of artefacts, I have also proposed interpretations and I have presented what I have learned. Throughout this study, knowledge was being ‘generated’ (Cole & Knowles, 2008, p. 67) through research-informed meaning-making processes. I also present a list of recommendations that are derived from the findings of the research.

Use and Value of the Research: Transferability and Naturalistic Generalizations. The discussion of the findings presented in Chapter 9 is intended to respond to possible ‘So what?’ questions, and the conclusion presented in Chapter 10 is intended to respond to potential ‘Now what?’ questions that readers might have when reading. As part of the conclusion, I have indicated the significance and the contributions of this research, and I have initiated an action plan by providing a list of recommendations for key stakeholders. These structural and rhetorical moves are intended to increase the “utility” (Cahnmann Taylor, 2008, p. 250) of the research by clearly presenting take-aways. Given the complexity of this study, my reports of learning strive to be ‘humble’ (Cole & Knowles, 2008, p. 67). Any claims to knowledge are advanced with both “sufficient *ambiguity* and *humility*” (Cole & Knowles, 2008, p. 67). I recognize the partiality of the research and what it can and cannot effectively support. Learning is not being generalized to a larger population of students, nor is it being generalized to other testing programs.

Even though I might not be able to generalize the research results, numerous scholars highlight the potential transferability of qualitative research (see Barone, 2008a; Lincoln & Guba, 2009; Toma, 2006; Tracy, 2010). When a reader “feel[s] as though the story of the research overlaps with their own situation” (Tracy, 2010, p. 845), a process of transferability occurs whereby a reader “intuitively transfer[s] the research to their own action” (p. 845). This is the process of making connections (see Clarke & Whitney, 2009) that is identified within the proposed critical literacies construct. A criteria upon which arts-based research can be judged, according to Barone (2008a), is whether or not the research is:

able to move the reader beyond the constraints of the particular and local, that is, to seduce the reader into seeing the world of the text as analogous to and relevant for situations that reside outside the world of the text and within the more proximate everyday world of the reader/viewer. (p. 31)

The goal is that a research text can prompt a reader to compare the research to the reader’s own previous knowledge and experiences of the world in an effort, not to generalize, but to transfer learning from one context to another. Through this process of transferring learning between contexts, a reader is potentially seeing value in what can be learned from the research. Research

that brings readers to a “profound interrogation” of the world could be deemed to be of high quality (Barone, 2008a, p. 32). This process of transferring learning from one context to another has been described in terms of “reader or user generalizability” (Merriam, 2002a, p. 28) and also “naturalistic generalizations” (Stake, 2009, p. 22). According to Merriam (2002a) “reader or user generalizability” (p. 28) occurs when a reader of the research “determine[s] the extent to which findings from a study can be applied to their context” (p. 29). The term naturalistic generalization appears to be used to indicate a less intentional shift on the part of readers. Tracy (2010) lists naturalistic generalization as one of the ways through which a criteria of “resonance” (p. 840) can be achieved. For Lincoln and Guba (2009) the similarity and “*fittingness*” that exists between contexts is what makes transferability possible. Fittingness is an indication of the “degree of congruence between sending and receiving contexts” (Lincoln & Guba, 2009, p. 40). Providing “thick description of the sending context” is required such that “someone in a potential receiving context may assess the similarity between” the contexts (Lincoln & Guba, 1985, p. 126, as cited in Toma, 2006, p. 415). Lincoln and Guba (2009) propose using the concept of a ‘working hypothesis’ (p. 39) to explain how a reader might wonder about whether or not something they are learning, which is situated and uniquely contextualized, might relate and apply to another context. Lincoln and Guba (2009) write, “If Context A and Context B are ‘sufficiently’ congruent, then working hypotheses from the sending originating context *may* be applicable in the receiving context” (p. 40). The transferability of any research can be suggested by the researcher who envisions possible uses of the research, but ‘it is up to each reader to determine transferability’ (Toma, 2006, p. 414) on an individual basis. Another one of the “Qualities of Goodness” identified by Cole and Knowles (2008) that is related to this is that research reflect “Intentionality” (p. 65). This study has multiple objectives, and each one relates to a broader goal of enhancing literacy education in Ontario and contributing to the field of literacy assessment more generally.

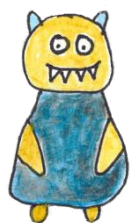
Throughout this chapter, I have provided a strong foundation for conducting validity research as inquiry. The qualitative methodology presented in this chapter, which draws upon multiple methods to shape the data collection, analysis, and representation, provides unique opportunities for learning how students report understanding and experiencing literacies and a literacy test. In the chapters that follow, I present the results of this inquiry.

CHAPTER 6. INTRODUCING THE INDIVIDUAL CASES

In this chapter, I introduce the ten cases informing this study. I first present a general overview of how each of the ten participants were conceptualizing literacies and how they reported their experiences with the literacy test. Following this, I present three detailed case overviews. In each of the detailed case overviews, I present a selection of background information that gives shape to each case followed by a discussion of what each participant contributed to this study generally in terms of the participant's understandings and experiences of literacies and the OSSLT. An overview of the background information pertinent to each of the ten cases was presented in Chapter 5 when first introducing the participants (see Table 14). In addition to presenting information about the participants' grade levels, the English stream they were pursuing, and their English language background, in the detailed case overviews, I also list a selection of the participants' reported interests, their community involvement, and their future educational goals and career aspirations. This information is noted since it is helpful to be able to observe how the participants' understandings of literacies could potentially connect with their affective frame of reference. These case overviews illustrate the richness of what the participants contributed to this study as they reflected on their conceptualizations of literacies while making connections with their life experiences both in and out of school. The three detailed case overviews illustrate how the contributions made by each participant came together to form a case study that is tailored to this inquiry. Each of the case overviews offers a unique "opportunity to learn" (Stake, 1995, p. 6). Although only three detailed case overviews are presented, all ten cases were integrated into the analysis, and all ten cases are reflected in the findings presented in the chapters that follow.

When data are represented in the form of a direct quotation, unless otherwise indicated, the contributor of the quoted text is the participant associated with the case being discussed. The participants' words and expressions are presented as they were contributed to this study, and only excerpts of data that include texts and images created by the participants are included when providing examples. This study sought to create generative spaces that were not about finalized or polished end products. The focus of the research sessions was on generating thinking and inspiring conversation about the participants' literacy education. Thus, although I acknowledge that there are errors with regards to how the participants were using conventions in the texts they were producing, instances of unconventional language use are not being highlighted.

General Overview of the Ten Cases



Cadi Chandler. Cadi initially explained that literacy was reading and writing, and it was anything that had to do with conveying information through words. Cadi also thought speaking and languages probably have to do with literacy because they have to do with communication; however, Cadi was not as confident with this understanding of what literacy might entail, since only reading and writing are included on the literacy test. During the last interview, after having reflected on literacy quite a bit, Cadi said, “if you ask me basically what is literacy, I’d be like reading and writing, but it really is much more than that. It’s like, I don’t know. See, it’s hard to like think of more, but it’s like everything basically.” Cadi said that literacy is important for being able to communicate, to make informed decisions, to be “an active citizen,” and to “contribute to the world in a positive way.” In terms of the literacy test, Cadi said that, because she is “a good English student,” she expected to pass the test. She said she “was worried about the time limit” though. For Cadi, receiving a higher test score than one of her peers seemed to bring out her competitive side, but it also seemed to validate Cadi in believing that she does have strong literacy skills. Cadi wanted to share her opinion that she thinks “the test is important because it is necessary for a person to be literate in today’s society.” Although she saw value in having a literacy test, Cadi was critical of the design of the test, and she wondered if there might be other ways through which students’ skills could be evaluated. In particular, Cadi was critical of the content she felt she had to write and the opinions she had to share to ensure that her responses would receive high marks. She said she wrote what she thought the evaluators were “looking for.”



Bert Jane. Bert defined literacies as reading and writing, and she wrote that literacies have to do with “Comprehension” and “Conventions.” Bert provided a wealth of examples of how she experiences literacies in her daily life, and she showed that reading and writing relate to many of the activities she engages in. Bert tended to focus on words in particular when identifying what literacies might look like; however, she noted that literacies are “EVERYTHING.” In terms of the literacy test, Bert said she expected to pass the test because she had high marks in her English course. Bert highlighted that she felt the testing practice was unnecessarily demanding for students though and possibly with negative implications regarding how students, including herself, might feel about literacy. In particular, Bert did not like having to repeatedly complete the same types

of tasks in her classes and again on the test. She said she felt like she was “being punished” when she had to write the test. Bert felt like the testing process was long and stressful and some of the test items were not clear enough, which made completing the test challenging. She said, “it’s not communicating well what they want from you.” Bert struggled with making connections between the tasks on the test, the skills that were being evaluated, and how those skills can be used in diverse contexts, which made it difficult for her to see value in the testing practice.



Oliver Humphry Oliver defined literacy as “the capability of reading and writing.”

He associated literacy with language, and he said that being able to communicate using a common language is important. Oliver also said that literacy has to do with listening. He noted though that he has “never actually been told what a literacy is.”

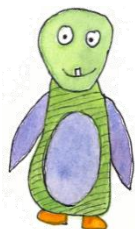
When listing literacy skills he believes he has, Oliver wrote, “reading; writing; understanding reading.” Oliver’s literacy goal was to “read and write understandably,” and he noted that reading and writing are essential for one’s “safety” and general “awareness.” Oliver explained that he has dyslexia, which makes it challenging for him to read and write quickly, and he noted that he makes typographical errors when writing. Oliver presented examples to illustrate his belief that these errors do not detract from his ability to communicate in ways that are understandable. Oliver explained that he felt like there was a disconnect between what is expected of him at school, and through the literacy test, and what ‘real life’ is like. Oliver wrote the OSSLT twice, and he was unsuccessful both times. He reported receiving scores of 295 and 298, but a score of 300 is required. Oliver could not understand how he was passing all of his courses, but yet he was unable to pass the test. Oliver explained that aside from spelling and grammatical errors, he likely did not write long enough responses on the test. Oliver successfully completed the literacy course, but he did not think his skills had significantly improved.



Donna Harlow. Donna conceptualized literacy as reading, writing, and communicating orally. She considered thinking and working with others to be literacy skills, and she explained that numeracy, specifically when people “write down numbers,” is also literacy. When it came time to write the literacy test, Donna said she expected to pass the test. Donna said she actually found the test to be

“really easy,” and she felt it was important to share her view that the test was easy. She explained, “maybe some kids will, if I say it’s easy, maybe they’ll think it’s easy too.” Donna suggested that the test could have been “a little bit more complicated,” specifically because she

did not have to read very much of the provided texts to be able to complete the test items. Donna explained, “You don’t have to read it [. . .] You just have to flip back to like line 10 [. . .] That word. They’re asking what that word means in that sentence.” Donna said she prepared for the test “just in English” classes, but they prepared “a lot.” She wrote, “It was everything I had previously learned in english class. My teachers did a really good job getting me prepared.” Donna thought that the literacy test should also be assessing oral communication though.



Finn Huxley. Finn associated the term *literacy* with the literacy testing process.

When given an opportunity to define what literacy means to him, he wrote, “The term ‘Literacy’ means each year a Dozen people partake in writing a Literacy test.”

Finn also noted that “Teachers have literacy skills & Students Don’t.” Finn wrote the literacy test for the first time in Grade 11 after being deferred in Grade 10. He explained that he “wasn’t doing very well in class,” and he was told he did not “have enough experience.” Finn noted that his first language is not English, but he did not reflect on his experiences learning the English language when talking about literacy or his experiences writing the literacy test. Finn did say though, “some of the work is so hard, I barely can even do it.” Finn thought that the literacy test was “too long.” He said, “I felt uncomfortable because I was not use to write for long periods of time.” Finn, nevertheless, thought he did well on the test. He did not yet know his test result. He explained that he was not continuing the semester or completing the rest of the year. He said he received a certificate to join the workforce, and he planned to return and continue school the following year. When asked, Finn said that if he finds out he was unsuccessful on the test, he thinks it will mean he will “just have to practice” to be able to “do better next time.” Finn noted that he would like to not have to write the test again though.



Anne Dawson. Anne’s understandings of literacy focused primarily on

communication, understanding, and the effective use of language. According to

Anne, literacy “is the ability to understand knolage given to you and apply it some place else. Be it reading or listening.” She also noted that literacy is about

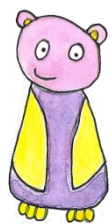
engaging with different types of texts, including visual texts, and she thought literacies might look like “art?, essay?, piece of writing, chart.” Anne wrote that her literacy skills include “reading, writing, understanding text/media.” Anne finds it challenging to express herself through writing, and she hoped to improve her “gramer and spelling.” For Anne, the purpose of developing literacy skills is “to better express ideas and yourself.” Anne said she

passed the literacy test, but, she noted, “it wasn’t like really good.” Anne thought it was her spelling and grammar that brought her mark down. She thought the test “gives students an idea of how to follow skills of writing” though. During one class, Anne’s English teacher focused on test preparation, and there was an afternoon workshop at her school that was intended to help students prepare for the test. Anne did not like that the test was “mandatory,” and she thought it was “quite boring.” She would like to see “more creative writing parts” on the literacy test.



Porsche Sawyer. Porsche did not provide an explicit definition of literacy or literacies; however, she noted that the purpose of developing literacy skills is for “Communication” and to be able to “deliver the message better, brief, and faster.” Porsche seemed to think that literacy was about understanding as well, since she wrote that “everyone have literacy skills, but in different levels. Because everyone

can read and write, but not everyone understands it the same.” When reflecting on her experiences and skills, Porsche said she “can read and analyze information from a text,” she can “understand the idea and can identify devices used,” and she “can write essays and support [her] arguments.” Porsche finds “Connecting the information [she] read[s] with real life situations” to be challenging, and she would like to “be able to communicate wiser as well as understand the meaning behind everything in a text.” In terms of the literacy test, Porsche said the test was “boring” and “long.” Although Porsche wrote that the test is “Pointless,” she also noted that the test “is important since its basic english and its needed later on in life.” One of Porsche’s critiques of the test preparation that was administered at her school was that it replaced independent reading sessions, and Porsche not only likes to read, but she thought that it was all of the reading she had done prior to writing the test that helped her do well on the test. She did not find the test practice sessions at school to be helpful though.



Ella Sage. According to Ella, “literacy means the skill of putting a group of words together and make a meaningful sentence out of it. This sentence must have perfect grammar and vocabulary.” Ella also shared that literacy includes “The ability of making arguments, reports, etc. and be capable of reading a concept and understanding the core of it. Also, being able to respond to a text and giving opinions.” Ella also noted that literacies are “Essential for Communication.” When self-assessing her literacy skills, Ella noted she has “writing” skills, she finds “understanding written concepts” to be challenging, and she would like to improve her “Reading; Writting; Understanding;

Speaking” skills. Ella wrote though that she has “no literacy goals.” As a newcomer to Canada, and someone for whom English is not her first language, Ella seemed to have been working hard to develop her English speaking skills, and she was doing so by volunteering extensively in the community. When it came time to write the literacy test, Ella said she “was so ready for it.” She reported using the online resources that were available to students, and she explained that she worked with the guidance department at her school to learn how to write an essay and a report, since she was not learning how to write these types of texts in her ESL courses. Ella explained that she found the testing practice to be demanding, even though she was prepared. Ella suggested that the length of the test in particular made successfully completing the test difficult.



Cora Elliot. According to Cora, literacy “means talking about wat yo’re intersted in.” Cora also wrote, “The one who can put his/her thought, ideas on paper has literacy.” Cora explained that the purpose of developing your literacy skills “is to learn and develop how to write.” She listed “writing” as her self-reported literacy skill, but she would also like to improve her writing. Cora said she finds

“connecting points together” to be most challenging. In terms of the literacy test, Cora said she thought she “did it well” and that she was going to pass the test, but she said she failed with a score of 295 when the minimum score required is 300. Cora said she did not understand how it was possible that she was taking university preparation English courses but failing the test. She suggested that the “stress” and the “timing of the test” can have a detrimental effect on students’ performances. Cora noted, “I’m not saying I’m so strong, but, um, just one test, that package, shouldn’t like tell if a student is really good or not good, you know.” Cora said she found the multiple choice questions that are paired with the reading selections challenging to complete. She said, “like some of them are so tricky.” Cora explained that for some of the questions, students have to “make connections” and they “have to read between the lines.” She also said she found reading the texts on the test takes up too much time, and she explained that there is not enough time to write the two long written responses, which makes it challenging to do well on the test.

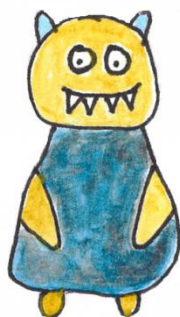


Sabrin Chester. According to Sabrin, “The terms literacy means testing the ability of someone in reading and writing in English.” Sabrin thought that “[l]iteracy is included in writing using present tense in essays and not in first person.” She said the purpose of developing literacy skills is because “English is used in everything so it is important for students to be able to know how to write

essays,” and people need to “know how to read and write in English.” Sabrin emphasized that literacy is about being able to communicate in a way that can be understood by others. Sabrin thinks the “people who are good in literacy skills are the ones who enjoy reading books and writing essays.” Her self-reported literacy skills include “writing short stories, reading books, and relating them,” and she says she struggles with “multiple choice” and “short answer” questions. Sabrin said she hoped to improve her “essay writing.” In terms of the literacy test, Sabrin explained that she was concerned she might not pass the literacy test. She said that her “experience taking the literacy test was scary and challenging, since it was [her] third year in Canada and learning English.” Sabrin said her ESL classes were helping her develop her reading and writing skills, and they were helping her prepare for the literacy test. Sabrin also participated in an after-school program to help her prepare for the test.

In the sections that follow, I present detailed case overviews for three of the ten cases illustrating the richness of the data associated with the individual cases, which were constructed throughout the data analysis and representation processes.

The Case of Cadi Chandler

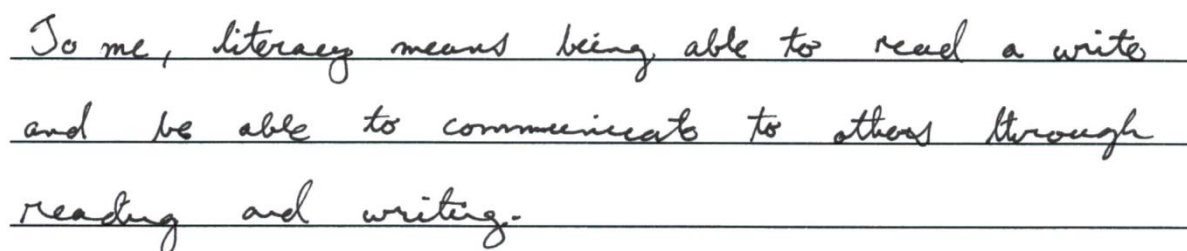


Cadi participated in the research study in collaboration with the school research site (Research Site 1). She was a Grade 11 student taking university preparation English (ENG3U). Cadi described herself as “an A level student,” and she reported having an “85-90% average in English.” English is Cadi’s first language. When outlining her interests and hobbies, Cadi shared that her interests include: “swimming, [. . .], kayaking, boating, tubing, snowmobiling, read[ing], watch[ing] TV, watch[ing] movies.” Cadi sometimes plays video games. However, she said, “I love to read.” “I read sci-fi and fantasy novels mostly.” Cadi also reported being quite interested in politics. At school, Cadi participated in the school’s vocal group, and she took part in a musical. In Grade 10, she was also on the school council. If Cadi could teach any of her courses, she wrote, “I would teach Drama because I love movies, acting, and directing.” Cadi did not have a job during the school year; however, during the summer, she said she worked at her family’s businesses doing secretarial work. Her tasks included answering phone calls, writing messages, writing receipts, receiving payments, and giving customers change. After high school, Cadi said she planned to go to university to pursue studies that would

align with a potential career in physiotherapy. She explained, “As much as I don’t like the idea of going back to school for six or seven years, definitely university.”

Understandings and Experiences: Literacies. At the beginning of the project, Cadi explained that “literacy means being able to read a write and be able to communicate to others through reading and writing” (see Figure 13). In her journal, Cadi also wrote, “Literacies look like words, anything that conveys information through words that one can read and write” (see Figure 14).

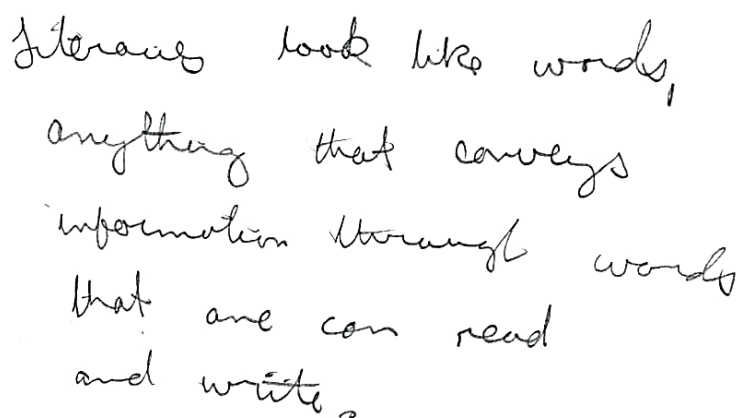
Question 2. What do the terms ‘literacy’ and/or ‘literacies’ mean to you?



To me, literacy means being able to read a write
and be able to communicate to others through
reading and writing.

Figure 13. Cadi’s Initial Definition of Literacy (Project Questionnaire)

What do literacies look like?



Literacies look like words,
anything that conveys
information through words
that one can read
and write.

Figure 14. Cadi’s Journal: “What do literacies look like?”

Throughout the project, Cadi’s understandings and ways of articulating her understandings of literacies seemed to be developing, and, while working through different research activities, Cadi began to expand her articulations of what literacies are to include speaking and engaging using language. As an example of how Cadi was wondering about expanding her understandings of literacy, in her journal, in response to the prompt “Literacies are . . .,” Cadi wrote, “reading; writing; language (possibly),” and, in response to the prompt “Literacies are not . . .,” Cadi

wrote, “TV; movies; instrumental music” (see Figure 15 and Figure 16). Cadi explained that there are “no words,” so these last three examples do not relate to literacies. Cadi also suggested that “listening to music isn’t really literacy.”

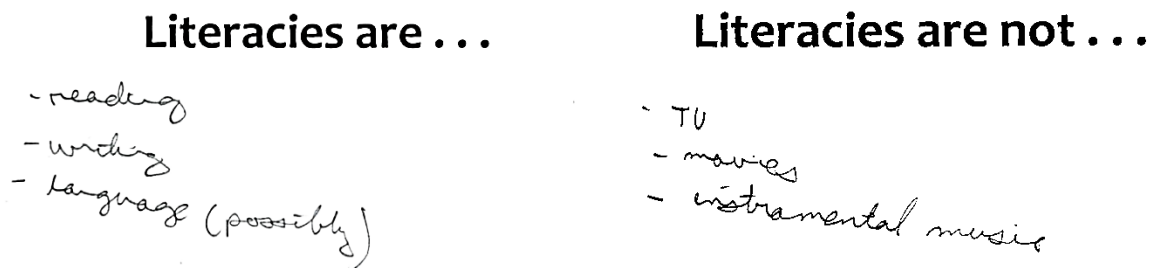


Figure 15. Cadi’s Journal: “Literacies are . . .” [Left]

Figure 16. Cadi’s Journal: “Literacies are not . . .” [Right]

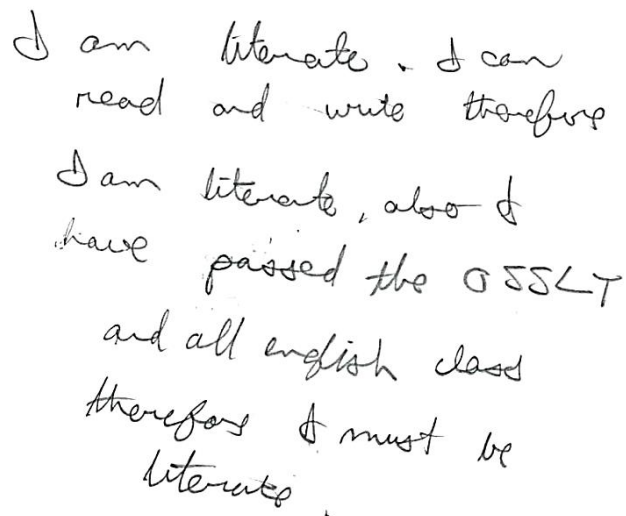
In her journal, in addition to writing that literacies are reading and writing, Cadi added, “language (possibly).” When talking about this artefact during an interview, Cadi explained that although “for everything else [she] put reading and writing,” in response to that prompt, she said, “I put that language can be literacy too [. . .], like as in other languages.” She said:

. . . it’s not really covered on the test. It’s just reading and writing, but I think that communication, like speaking and stuff, should be part of literacy if it’s not. I’m sure it is. I just wasn’t quite sure if it was just reading and writing, but like I think language should be.

This comment illustrates the challenges Cadi seemed to face when attempting to define a term that is supposed to be relevant and important in her life. Although the literacy test is presenting students with a particular definition of literacy, Cadi suggested that there might be more to literacy than what the literacy test is measuring. When Cadi reflected on her experiences, she began to question the definition of literacies as reading and writing, and she began to introduce other terms. Cadi did not use language reflective of extensive understandings of literacies though. Cadi considered, for instance, how watching television might relate to an understanding of literacy. She said that it does relate to communication, but “it’s not really the reading and writing basics of what” is being measured by the literacy test. Cadi was reflecting on literacies across contexts, and her comments suggest that she was perhaps trying to make sense of what it means to read and write in a variety of contexts and for a variety of purposes. In her journal, in response to the prompt “Are you literate? How do you know?,” Cadi referred to her school experiences, including passing the literacy test and her English courses, to define and also to

assess her literacy skills (see Figure 17). She also based her literate identity on her ability to “read and write.” Cadi did not expand on what being literate should entail, nor did she qualify her abilities in any particular way though. Other than meeting particular standards as established for the literacy test and for her courses, it is unclear what standard Cadi might use to self-assess her own skills.

Are you literate? How do you know?



I am literate . I can
read and write therefore
I am literate , also I
have passed the OSELT
and all english class
therefore I must be
literate .

Figure 17. Cadi's Journal: "Are you literate?"

During the research activities, Cadi also shared her wonderings about how “an argument for social media could be made.” However, she added, “but that’s basically reading.” At other points in the project, Cadi referred to social media sites as examples of when she engages through writing. She did not only associate social media with reading, despite saying that social media is “basically reading.” It seemed like, for Cadi, being able to find a connection between any particular engagement and either reading and/or writing meant that an expansion of a definition of literacy was not necessarily required, since the engagement in question, in this case, using social media, was already associated with literacy in some way. Summarizing her understandings of literacy, Cadi said, “I guess it’s displayed in different ways, but it’s usually in those three forms mostly,” which Cadi identified as reading, writing, and speaking. During our last interview, Cadi said, “if you ask me basically what is literacy, I’d be like reading and writing, but it really is much more than that. It’s like, I don’t know. See, it’s hard to like think of more,

but it's like everything basically.” Although Cadi focused on literacy being associated with reading and writing, she demonstrated that she took the opportunity to reflect on her initial thinking and expectations of what literacy entails throughout the different research activities. Nevertheless, she noted that it is difficult to articulate a different conceptualization that extends beyond literacy as reading and writing.

Cadi believed, as noted based on her graffiti walls handout responses, that “everyone uses literacy, it is an essential part of communication in society. The only people who don't use as much literacy are people who lack education (in poorer countries).” For Cadi, “The purpose of [having] literacy skills [is] to be able to effectively communicate ideas to others.” She added, “These skills are extremely important to me. Literacy evolves society. It was during times like the middle ages when no one could read or write.” Cadi also states that it is important to be able to “make an informed decision about” what you are reading. She explained:

[I]f you're reading something, and you don't understand what you're reading, then there is really no purpose to it. So, if you are reading and can make an informed decision, then you'll be an active citizen, and you'll be able to contribute to the world in a positive way, instead of just an unknowledgeable sort of just floating in the wind away.

Cadi listed many different ways in which she uses literacies. Cadi explained that she uses “literacies online: tweeting, emailing, writing book reviews; at work: writing receipts; at home: reading, homework; at school: essays, projects, reading, reports.” Cadi also reported watching YouTube videos and television shows online when she misses an episode of a show she likes watching. She also reported using the website, Goodreads. Explaining what Goodreads is, Cadi wrote: Goodreads “is a social network where you add books you have read, talk about books, follower authors and write your own stories. There are many ways to use literacy on the site.” Cadi also contributed sixteen photographs to the study, which, in addition to the photographs presented (see Figure 18), included photographs of books, a laptop, a vending machine, a school map, school awards, a bulletin board at school covered in posters with information, school murals, and also a photograph of Cadi and Bert (another participant). All but one photograph included words. For the photograph of the vending machine, Cadi said, “You know, read what you want to drink.” The bulletin boards included information about applying to apprenticeships, colleges, and universities, a sign about mental health at school, and a poster about reading strategies.



Figure 18. Cadi's Photographs About the Importance of Reading

When Cadi spoke about the importance of particular literacy skills, she identified reading as perhaps the most important skill. She explained why this is the case when talking about the photographs presented in Figure 18. Cadi submitted photographs of an emergency exit sign, an out of bounds sign, a fire alarm, and a defibrillator that she found at school. She explained, "the defibrillator is kind of a really good example of why literacy is important. If you are trying to save someone's life you kind of have to be able to read to use it." Cadi also referred to a photograph she contributed that shows a map of the school's floorplan that is posted on a wall in the school to explain how in emergency situations, such as if there was a fire in the school, it would be necessary to be able to read the map to be able to "find your way, out of the school."

Cadi's self-reported literacy skills included "reading, writing," and the literacy skills that Cadi struggles with or finds more challenging included "reading *1984* because it was boring." On the literacies graphic organizer, she wrote that she would like to improve her "writing fluency." She explained, "I guess writing is a little more difficult than reading and reading comprehension." Cadi's current literacy goal was to "get at least 85 in English class, 90 would be great." In her journal, Cadi wrote that her career will "probably not involve any literacies [. . .] outside of university[;] however[,] staying informed and involved in the world will require literacy." Cadi also noted elsewhere though that in ten years, it is possible that she would be "doing literacies required for [her] job." It is possible that even though Cadi specified a proposed career, she might have been lacking information and/or awareness about what that line of work might entail to be able to specify how literacies might relate or be valuable to her in the future.

At times, Cadi presented a fixed definition of literacy while also expressing wonderings about whether or not the definition should or could be expanded to include more than reading and writing. Cadi seemed to resist limiting the concept of literacies to reading and writing, and, throughout the research activities, she expanded the term to include understandings that were

based more on her experiences. It seemed as though, when attempting to define literacies, Cadi was working through and juggling multiple spheres of thinking or realms of experience simultaneously. She seemed to be working through the traditional jargon or familiar language that she might have learned at school in contrast with the experience-based or empirical knowledge she was developing while reflecting on her experiences. Cadi said she learns about literacies “from parents, books, school, TV, [and the] internet.” When asked how she works on improving her skills though, Cadi replied, “Outside of school, I don’t really do anything.” Cadi elaborated on her response to explain that she does not write essays outside of school, but she said that she writes receipts for work during the summer, she writes posts for social media, and she writes book reviews. She also said that she reads at home, but she does this mostly during the summer.

Cadi was not familiar with the term *critical literacies*; however, she presented many examples that demonstrated that she attempts to be socially and critically aware of how different perspectives and views are shaped and shared. For instance, when talking about her interest in politics, Cadi shared that she believes her parents have had an influence on her thinking and how she engages with texts. She said:

[T]hey’ve really informed my opinions about the world – Kind of bias in some instances, like, my Dad’s Conservative, so, of course, I love the Conservative Party. I’m like, “Yay, Conservatives.” But had he been Liberal, I’m sure I would have grown up and been like, “Oh my god, Conservatives are horrible.” But of course, now, like they’ve taught me to form my own opinions and to be sort of biased about what I see on the news, or not biased, like be judgemental about what I see on the news and pick and choose what I believe and stuff like that.

Through this comment, Cadi highlighted the importance of questioning texts.

Understandings and Experiences: OSSLT. Cadi successfully completed the literacy test in Grade 10. Describing her experience writing the test, she wrote, “I am a good English student so I was not worried about failing the test however, I wrote a lot and I was worried about the time limit.” During an interview, Cadi explained how she “already knew” that she “was a good English student,” and so the test “just verified that.” Talking about her results, Cadi added that she “would have been so embarrassed,” if she had failed. She explained, “I would still be so upset. I know myself. I would be horrified.” Because the testing practice simply reiterated information she felt she already knew, Cadi said she was alright with how things turned out. Cadi reported having felt quite pleased to find out that she received a higher score than one of her

peers who typically received slightly higher marks in their English courses than Cadi. Cadi said it was “exciting.” She explained, “I beat her by like ten on the literacy test, and I know, I kind of rubbed it in just a little bit, but I was really proud of myself, but yeah, she, she was upset.” On whether she thought her own results were accurate, Cadi said, “I think so. I’d like to think so.”

I asked Cadi why she wrote the literacy test, and what was the purpose of the test. She replied, “Well, I write it because we’re forced to, and I want to graduate high school. I think the purpose of it is just to make sure that students have the required literacy before leaving high school, which is a good idea. Yeah.” Cadi explained that she thought the literacy test was:

basically to see students’ level of literacy and you have to meet a certain requirement for how the government thinks you should be in real life, so it’s basically, if you fail, it’s because you’re not, in the eyes of the government, literate enough to be fully functional in real life society.

She added, “I think the test is important because it is necessary for a person to be literate in today’s society. Reading comprehension (understanding what you read) and being able to convey ideas through writing are important to function in society.” This thinking aligns with the goals of the Ontario Ministry of Education. This is the foundation upon which the literacy test is based. In terms of how much Cadi values the literacy test though, she shared the following thoughts:

The literacy test itself, it’s hard to say, cause like, I personally think it’s a good idea for students to be marked saying that, “Okay, you’re literate, so you’re good outside of high school.” However, there’s a lot of students that are perfectly literate that fail just because of the pressures of the test, or because they get like 3 minuses in Academic English, let’s say, so they just lose by a couple of points, but you know they are perfectly literate. They’re fine. So, the test is kind of like, it’s good, but it’s bad. Like, I agree with the premises of it, but there’s just some people that can’t take tests well, so, they have to take the literacy test instead [referring to the literacy course], so I feel bad for them, but overall, I think it’s a good idea to tell that students are literate before letting them leave high school.

In Ontario (OMOE, 2010b), a Level 3 is comparable to a letter ‘B’ and represents the range of achievement from 70%-79%. A Level 3- would be at the lower end of that range, while a Level 3+ would be at the higher end of that range. Level 3 is also considered to be the provincial standard of achievement (OMOE, 2010b). Although Cadi was not reflecting on her own personal experiences here, she drew attention to a few issues that are part of testing culture, which includes a focus on test-taking skills and a realization that some students might not perform well on a standardized test in particular. On the “OSSLT” graffiti wall, Cadi wrote, “There should be a way to determine if a person is literate B4 they pass high school but the OSSLT may not be the

best way.” Cadi reiterated her belief that there might be value in the test when she considered that “all teachers are different” and “it’s good to have one standardized thing, because [. . .] all the teachers mark differently.”

Although Cadi reported seeing good in the premise of the test, she was quite critical of the testing practice itself. Cadi critiqued the imposed time limit for completing the test, and she also was critical of the reading selections that were provided on the test and what she said she felt she had to write in her responses that corresponded with the provided texts to be able to receive a successful test result. Cadi’s first contribution to the “OSSLT” graffiti wall highlighted the time limit issue (see Figure 19). Having enough time to complete the literacy test was a concern Cadi repeated on multiple occasions. Throughout the study, Cadi stated, “The only problem I had with it was just like finding more time to write it down, because I had to really scramble to get the questionnaire done at the end.” She added later during another interview, “I always feel rushed to finish tests. I have a lot of stuff to write, and I like to have it, like, I like to think about what I’m writing and have time to lay it out properly.” According to Cadi, the literacy test “doesn’t really give people the opportunity, that like are perfectly literate, to do well.” In her journal, in a letter to those responsible for the OSSLT, Cadi wrote, “I am an A level student and I barely got the test done in time.” Cadi’s comments suggest that she perceived there to be flaws with the design of the test that restricted her ability to perform and to be able to demonstrate her skills as she might in other contexts.

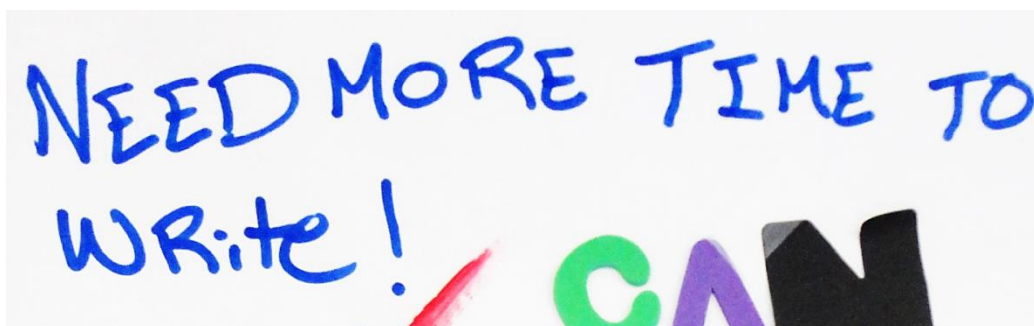


Figure 19. ‘Need More Time’ on the “OSSLT” Graffiti Wall – Contribution by Cadi

One issue that contributed to the time pressure, according to Cadi, was that it was sometimes challenging to come up with material to write about. Cadi explained that it can be challenging to come up with a high quality response on the spot especially without having access to any resources. Cadi was quite critical of one of the test items she had to complete that focused on identifying a local environmental issue because she was unable to do any research, but yet she

was being asked to generate content on a specific topic. Cadi explained, “I’m like that’s a good question, until I’m like I don’t know an environmental issue affecting my area specifically, so I know a lot of people that had that question were like, ‘I have no idea what to write.’” She continued to explain that she chose a topic that “was the first thing [she] could possibly think of.” However, the problem, as Cadi explained, is that when “you just can’t think of something right away to write on, it wastes time, and then you barely have time at the end” of the test. In some ways, it seemed like writing the test was an exercise in time management, since Cadi reported having to quickly produce all of her responses and compose all of her texts expediently, even if it meant sacrificing the thought process that goes into designing and structuring a particular text.

Cadi also spoke quite a bit about writing the answers that she thought the evaluators would want to read, and the responses that she felt would get her a higher grade. On writing for the evaluators, she said, “you can’t really do what you want and put your honest opinions and your own experiences. It really is feeding into some expectation almost.” Discussing how she goes about responding to test items, and even completing assignments for courses that are being evaluated, Cadi explained her strategy for responding as follows:

I find, like me personally, [. . .] when they ask a question, I kind of get the idea of what they want from that, and then I’ll be like, what’s the easier answer, or what would be easier to write about. Like for a lot things, like for essays, [. . .] I’ll be like, maybe I don’t agree with this, but it will be easier to argue this way, so then I do that instead. So, whatever would get me a better mark that would be easier for me to do personally [. . .] I find like my ideas of what people are looking for change what I would probably write, if it was just like writing to myself.

Cadi provided an example explaining that if she has to present an argument that is either ‘pro’ or ‘con,’ meaning either stating and supporting a particular position or arguing against and refuting a position, she will just present whichever argument is easiest to write and more likely to appease what she thinks the evaluators would agree with and award a higher score. Cadi said she writes what she “think[s] they are looking for.” Cadi’s comments suggest that she strives to complete tasks in such a way that she feels will appeal to the bias of those who will be marking her work. In this sense, Cadi tailors her literacy performances to please those who are in control of evaluations.

Cadi highlighted a few questions on the test, including the question about local environmental issues and also a question about polar bears that she found challenging to complete. Cadi spoke about a particular reading selection on the version of the OSSLT that she wrote that presented

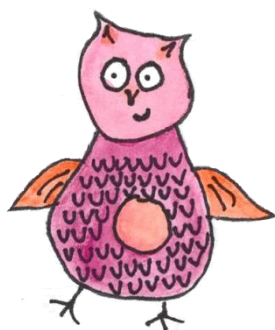
what she felt were particular views on polar bears and global warming that did not align with research she has read on these subjects. As Cadi noted, the questions on the test did not necessarily give Cadi the opportunity to be critical of the texts she was asked to respond to though. Cadi explained that she did not use the response space provided to challenge the text or to share her views on the topic at hand. Instead, Cadi stated that she felt she would likely receive a higher mark if she simply echoed what the text was saying. She explained, “Like for the polar bears, they want you to say it’s bad. Like you know what the main idea is, so they want you to write it out, and say that.” Cadi said, “I write the answers that I know they’re going to want. I don’t write what I personally think.” It seemed as though Cadi did not perceive the test to be a space where she could share her views. Cadi also said that even the opinion piece questions “aren’t the best judge about how [students] think about stuff.”

Reflecting on her experiences with the OSSLT, Cadi stated, “I guess it sort of helped me understand what people are looking for in literacy, like what they want you to say, and what they want you to get from what you are reading-ish.” This might seem like something positive, in that Cadi is potentially able to develop a greater conscious awareness perhaps about what in particular about her writing is most valued (e.g., being able to state a main idea clearly); however, I think it is concerning that Cadi’s main focus was on changing her voice to meet what she perceived to be the most valued thoughts and opinions of those with the power to determine her test results. Cadi’s contributions draw attention to how the personal content of students’ responses factors into the evaluation criteria, and whether or not a student’s views and personal opinions matter in the measurement context. This is especially significant given that one of the valued genres of texts on the literacy test is an opinion piece. I wonder what made Cadi believe that particular opinions are likely to be more highly valued than others.

Cadi’s expressed awareness of how she constructs particular texts for a particular audience suggests that although Cadi does not seem to be familiar with critical literacies as a term, she engages with literacy practices related to this conceptualization of literacies when she carefully crafts responses in performative contexts. In some ways, Cadi’s contributions to this study were also similarly performative in that she shared her views on particular topics, she created a profile for herself as a high-achieving student, and she also positioned herself as someone who would be presenting opposing views on the literacy test when contrasted with what she said she thought would be the popular opinion. Cadi said she thought most students would state that the OSSLT is

not a good practice. Cadi said, “I figured a lot of people are probably going to be really negative about the test, so I figured I’d probably be a little different, because I wasn’t that negative. I had no problems with it. I actually like English, so. . . . I figured you could probably need some people that are not, ‘It’s so horrible’ and everything [. . .] I figured it would be nice to have some contradicting views on it.”

The Case of Bert Jane



Bert participated in the research study in collaboration with the school research site (Research Site 1). She was a Grade 11 student taking university preparation English (ENG3U). English is Bert’s first language. Bert’s interests and hobbies include “reading, writing, TV, sleeping, eating, music, art.” When it comes to reading, Bert said, “I like many books like romance or supernatural or anything.” Bert also said she enjoys writing stories in her spare time, but she said that she likes writing “as long as it’s not involved in school.” She added, “Like on my own time, I enjoy it more.” Bert said she writes text messages to her friends, and she likes the website Tumblr: “You have your blog, but it’s not really a blog; it’s pictures and quotes.” Bert has also written songs. At school, Bert was a member of the vocal group, and she participated in the school musical. Bert was also a member of a mentor program at her school, and she also participated in a day-long event that a group of students from her school attended where social activists presented on various global issues that might resonate with youth. With her family and Church community, Bert explained that she went on a mission trip for a week to another country a couple of years ago as part of a Vacation Bible School. She drew on this experience a bit when talking about literacies during the study. Bert also noted that she had has a few jobs, which she said gave her experience writing a resume and interviewing for a job. Talking about her plans after high school, Bert suggested a few things she might do, including accounting, but she more often said, “I have no idea what I want to be.” She said her plans after high school are to “figure out what [she] want[s] to do, then go do it.”

Understandings and Experiences: Literacies. Bert primarily described literacies as reading and writing, and she provided many examples of how reading and writing are a part of her life. The following are examples of when, how, and why Bert engages with literacies: “reading, writing, texting, school, homework, filling out paperwork.” Bert’s self-reported literacy skills are

“reading and writing,” she wrote that she wanted to improve on “understanding Shakespeare,” and her current literacy goal was to “pass English with 85+.” When making connections between literacies and her experiences at school, Bert referred to her science, music, and drama courses. She provided the following examples to note that literacies relate to activities she has done at school: writing lab reports, drawing and labelling the digestive system, reading sheet music, reading lyrics, and reading or writing plays. When providing examples of what engaging with literacies might look like, Bert focused on identifying moments of writing or reading.

The collection of fifty photographs that Bert contributed to the study emphasized that, for Bert, words in particular are related to literacies. See Figure 20 for a selection of Bert’s photographs.



Figure 20. A Selection of Bert’s Photographs

The photographs Bert contributed included a note about a telephone number that was referenced in a movie, two photographs with pages from books with selected lines of text in focus, a description of a *Cirque du Soleil* show, the final score screen from a video game about singing lyrics, a list of character development prompts for story writing, many signs (e.g., an exit sign, an out of bounds sign, signs on school doors, a stop sign, street signs), items or products with text (e.g., a pet store window advertising a chinchilla for sale with the pet’s name and price listed, a can of pop/soda, an apple juice bottle and a cup, signs from a restaurant about paying once served, and a thank you sign with one brand’s logo, a fire alarm, a hand dryer, a towel dispenser, a lip balm, a vending machine, a defibrillator, a coaster), instructions (e.g., for knitting and for anaphylaxis and Epi-Pen usage), school murals, the word “feel,” which might have been part of a

painting on a wall, a wall decal phrase from Bert's drama classroom, bulletin boards, individual posters, a school map, awards, a graffitied 'Hi' on a mirror reflecting a cellphone, a comic strip, an improvisation prompt card, the cover page of a play, a collection of movies, a television screen with a screen that reads "DVD," and photographs of a computer at school showing science modules. Each of these photographs included words.

Describing her experience playing a video game where you sing along to songs, which was the focus of a photograph, Bert explained that she sometimes finds the singer sings too quickly, so she turns on the subtitles to be able to follow the lyrics more easily, since then the lyrics appear in print on the screen. Bert said she has also played the game and used the subtitles in different languages because she likes hearing how different languages sound. She also said she likes seeing how different the written script of the lyrics for a song look in different languages. From her experiences playing the game, Bert said she noticed in particular that some text is much shorter or longer when written in other languages. Bert seemed to understand that literacies are related to language, but she added that literacies extend beyond just what can be achieved using the English language. She noted that she struggles with using her skills in French as one example.

Bert did not highlight words explicitly when responding to the journal prompt 'Literacies are . . .' Her contributions on this page of her journal included the following: A sticker of a stack of books, which lists genres of texts in the background, a sticker that reads 'First Day of School,' a sticker of a magnifying glass, which she positioned next to a googly eye she attached to the page, and, next to this, Bert wrote, "looking for a deeper meaning." Bert also attached one of the research kit tags that said, "For attaching additional materials," and she wrote, "reading and writing," "media," "internet," and "comprehension." On the following page in the journal, Bert indicated what "Literacies are not . . .," including "sleeping," and she noted that they are not "in animals." She also wrote, "all over the world" and "always fun," and she included two feathers, a sticker with a night sky and a star, as well as a sticker that has circles that could resemble a sun with rays or a flower. Bert said, "a chair is not a literacy. It doesn't have words and letters all over it." However, she also suggested that a microwave is not "a literacy," even though it has words on it.

Bert included representations of a wide range of texts when defining literacies, but she did not talk about how visuals, sounds, or movements, for instance, might factor into an understanding

of what it means to engage with literacies. Her justification for the inclusion of particular items was most often based on being able to read words in some form or another. On the “Literacies” graffiti wall, Bert contributed many items that relate to the photographs she contributed. On the graffiti wall, she drew a television, and she wrote the words “Books,” “Lyrics,” and “Pencil” (see Figure 21). She included a crossword puzzle, a map and a legend for reading the map, a few references to social media, a price sticker, an image of money, and other contributions that could perhaps be summarized by her contribution of writing the word “EVERYTHING.” Bert also wrote the words “Comprehension” and “Conventions” on the “Literacies” graffiti wall.



Figure 21. A Collection of Bert's Contributions to the “Literacies” Graffiti Wall

Although Bert's contributions focused primarily on reading and writing, she expanded this conceptualization of literacies to talk about communication and comprehension and how they relate to literacies. According to Bert, literacies are “reading, writing, conventions, communication, comprehension.” Talking about reading comprehension, Bert explained, “I feel like literacies are not just surface, but being able to read between the lines on some occasion too.” In her journal, Bert wrote that literacies are about “looking for deeper meaning.” Bert was not familiar with the term *critical literacies*, but she was aware that there are different ways to read. When explaining how communication and comprehension factor into literacies, Bert also shared her considerations of how engagement with people, and not only engagement with written texts and words, relates to literacies. Bert spoke about how communication and comprehension are important for different jobs. She emphasized in particular how communication and comprehension are important if you work with people, such as in sales or in counselling. Bert also commented that understanding is an important part of life, and without understanding, she

said, life “would be very lonely.” She noted that it is important to be able to ask for help and to be able to express oneself. For Bert, the purpose of developing literacy skills is to “prepare us for life, good jobs, good communication skills.” Despite not knowing what type of career she is most interested in, Bert noted that her career would “probably use literacies.”

Understandings and Experiences: OSSLT. Bert successfully completed the literacy test in Grade 10. She said that, because in Grade 9 English she had a final mark of “at least 80s or 90s,” she expected to pass the test. Bert said that if she had failed the test, she would have cried. She seemed to believe that a student’s test results can have a profound effect on students’ developing literate identities and on their ongoing academic achievement. Bert explained her thinking as follows:

If you’re given a label, then you kind of become that label. Like if someone keeps telling you you’re ugly or something, you’re going to start thinking you’re ugly. It’s the same like, if they tell you you didn’t pass or you didn’t do very well, it’s basically like, “You suck at English.” So then you start doing bad in English, when you were a 90 student. You start getting worse and worse, because you feel like you’re bad, because you didn’t pass this test or whatever.

Although Bert hypothesized that a negative result could have a damaging effect on students, she noted that she did not see the test as being very meaningful to her personally. In her journal, in response to the prompt that asked, “Are you literate? How do you know?” Bert wrote, “Good marks in English; Passed OSSLT; I can read and write; I completed this journal” (see Figure 22), and she pasted a sticker with the word “School,” which she underlined, to the left of her list.

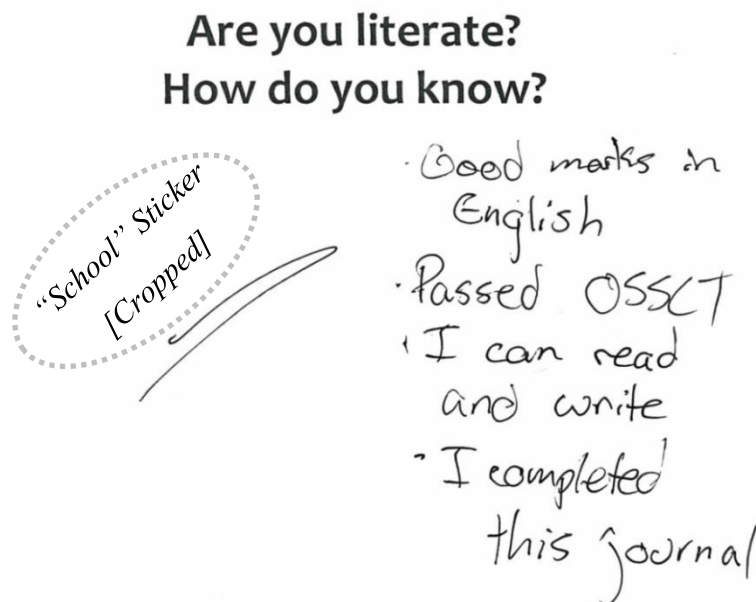


Figure 22. Bert’s Journal: “Are you literate?”

Bert defined herself as being literate based on a series of experiences, which all related to school. Bert also provided many instances throughout this study of how she reads and writes outside of the context of school though, so it is possible she does not only base her literate status on evaluations conducted through school. Bert explained her inclusion of the OSSLT in this list by saying, “I just put it, even though I hate it. And you can find out other ways as it’s not the only thing I wrote obviously.” Bert said, “I guess according to them, I am literate.”

Despite passing the test, Bert did not speak positively about the OSSLT. She raised a number of concerns about the literacy test that emphasized: the length of the test, the demands on the individual, the lack of resources, the lack of available time, the pressures surrounding the test, the content of the test being boring and repetitive of Grade 9 English, the clarity of the test items, there being test preparation during class time, the fairness of assessing all students in the same way, despite them having all had different educational experiences and different teachers, and the utility of a standardized test for a diverse group of students. When asked if she values the literacy test, Bert replied, “I don’t.” Reflecting on the value of the test, Bert wrote, “Being able to read, write and comprehend is quite important for life however there are other ways to test / assess this skill without a major test.” Bert said that she felt a bit like she was “being punished” having to write the test, since she always passes her English courses. Bert stated, “it doesn’t really show anything that’s not already shown in your class work.” She said that the test makes you feel “annoyed, because you have to write an extra essay and an extra newspaper article for no apparent reason.” She said, “It’s just irritating because they test on things that you do in class that you get marked on already.” Bert’s comments about repetition are significant. The OSSLT strives to be closely aligned with the curriculum such that, by design, students are only being tested on knowledge and skills that they have had the opportunity to learn. The problem, as Bert presented it though, is that if students are already learning and being evaluated on everything that the literacy test is assessing, why is the repetition needed. Rather than having everyone take a test, Bert suggested that it might be more productive if the students who are failing their English courses by midterm have to take the literacy course the next semester to help them improve their skills. Bert explained that if additional support is needed, both teachers and students should already be aware of this, and focused instruction and continued literacy support should exist for those individuals in particular.

Bert suggested that the literacy test's focus on particular literacy activities also made her feel differently about the activities that were being used on the test. She suggested that when students feel "forced" to read or write in certain ways, they begin to resent those practices rather than engaging freely and with interest. She explained:

In Grade 9, we had to read *To Kill a Mockingbird*, because that's what's in the course, and so many people hated it, and it's like, that is a great book, but it's because you had to read it. If you got to choose your own books, it wouldn't be half as bad, but because you are being forced to do certain books, it seems like it's horrible.

The context in which students are introduced to literacies, and the expectations of how they are expected to engage with those literacies, at least in this case, seems to have a determining factor on how students are going to develop an appreciation for, and/or a disinterest in, particular literacy practices. Bert explained how with the OSSLT:

you're being forced to write essays and read and do a newspaper article all in a small amount of time, so you are going to learn to hate all of those, even though they are not that bad in and of themselves. It's just the context and the purpose, it's just like, ugh.

She explained how you "grow a hatred against it." She said, "it just makes you hate it more and not want to do it, because it is excessive and unnecessary, and it's just like, why." Bert did not understand the purpose of the testing practice, or see value in the activities she was being 'forced' to do. Bert even described the testing practices as a "waste of life" (see Figure 23).

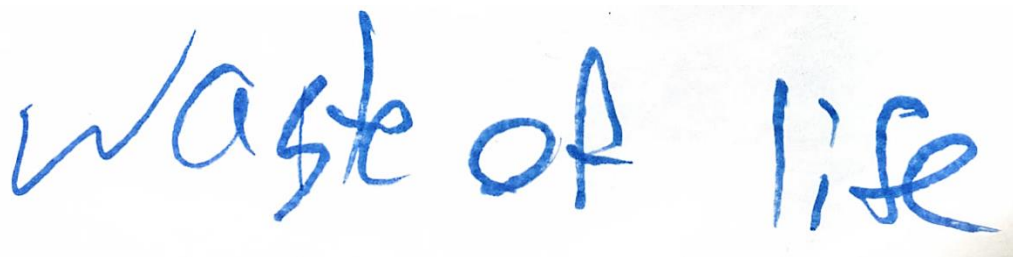
A photograph of a piece of white paper with the words "Waste of life" written in blue ink. The handwriting is cursive and somewhat slanted, with the letters being connected. The ink is a vibrant blue color.

Figure 23. "Waste of life" on the "OSSLT" Graffiti Wall – Contribution by Bert

Bert reported that she did not perceive the OSSLT to be a learning opportunity. She said that, with the OSSLT, students are "not really learning anything new," so it will not help "advance" their skills. The testing practice serves primarily as a monitoring and reporting tool to learn whether or not students are meeting the established test standards. Other than knowing if she has met the standard by passing the test, Bert did not report having learned anything else from her test results or through her experience taking the test.

Bert expressed that she felt that the test was also “Too much pressure” (see Figure 24). She explained that when you are writing the literacy test, you are just “sitting there, surrounded by a whole bunch of people in silence,” and “it’s just so much pressure and everything that sometimes you just can’t think.” She said, sometimes “your brain stops working, because you can’t work under pressure.” She described the test as being “harsh” and “strict.” Although Bert said she expected to pass the test, she added that she “always freak[s] out for tests.” She said the test is too long, and one of her suggestions was to “[m]ake it spread out” across two days, with one section per day. Bert explained, “Sitting for long periods of time thinking, reading, and writing can be exhausting.” In class, there is a lot less pressure and “more freedom.” Bert emphasized in particular how in class, students are able to ask questions. Bert highlighted asking questions in particular because, as she noted, some of the test items were not clear, which made it “harder to communicate a right answer back.” She said, “it’s not communicating well what they want from you.” She noted that students are also not able to “ask questions.” Although students can ask questions about the instructions prior to beginning each test booklet, as explained in the 2016 *Administration Guide* for the OSSLT:

Teachers and principals will ensure that [. . .] during the test, students do **not** receive: instruction on any concepts or items from the test once the test materials have been opened, explanations, definitions, translations or examples or reading vocabulary or writing terminology or encouragement or influence to alter or revise their responses. (EQAO, 2016c, p. 3)

For Bert, when you ask questions in class, it does not mean that “you aren’t literate.” Instead, she suggested, “it’s just being like, I need clarification because maybe I’m not perfect.” Reflecting on her experience writing the OSSLT, Bert noted, “[W]e want to try hard, but we kind of can’t, because we don’t have all of the sources available that we usually do, or the length of time” usually available to complete the sorts of literacy tasks that appear on the literacy test. Because of the time constraints and the specific testing conditions, Bert suggested that “it’s not even a reflection of the person’s ability, so it’s not really fair.” Bert suggested that the conditions in which she writes the test affect the products she is able to produce for evaluation. Despite all of these issues with the test, Bert noted that she thought her test results are a “fine representation” of her skills, but she suggested that it might be a harsher judgement than the types of judgements she is used to receiving in her courses.

A close-up photograph of a piece of white paper with the words "Too much pressure." written in thick, black, cursive marker. The paper is slightly wrinkled and has some faint smudges.

Figure 24. Pressure on the “OSSLT” Graffiti Wall – Contribution by Bert

Bert painted an image of a skull and crossbones on the “OSSLT” graffiti wall (see Figure 25).



Figure 25. Skull and Crossbones on the “OSSLT” Graffiti Wall – Contribution by Bert

Another one of the images Bert selected for the “OSSLT” graffiti wall read “Battle Ready” (Tardioli, 2012, p. 27). Selecting this expression might suggest that Bert thinks taking the literacy test is a *battle* or at least a challenge, and that the test is a struggle or obstacle that must be overcome. The term *ready* makes me think about what it means to be ready or prepared to take the literacy test. Bert claimed that test preparation for the literacy test was integrated into her class time. She suggested that she had learned all of the material covered on the literacy test in Grade 9, but she said they had to “do it all again to prepare” for the literacy test prior to writing the test in Grade 10. Even though Bert criticized the testing practice because she “had to incorporate preparation for it during class,” it seemed like Bert’s understanding of the literacy test was still quite limited. For instance, Bert stated, “Probably would have been nice, knowing what we had to” do. She said, “we didn’t really know what was on it either. We knew that we had to know how to write a newspaper article and that there would be like an essay and like a short story, but we didn’t really know any details.” In her English course though, she said “that’s basically all we did for the month” prior to writing the test. Bert said not many of her other teachers talked much about the literacy test. She said, “It was basically like, maybe, like have fun

at the literacy test tomorrow, but there was nothing like, no one talked about it.” Although the reading and writing skills assessed through the OSSLT are said to span the full Ontario curriculum, it seems as though, in this case at least, test preparation occurred in the English class. Bert said, “[Y]ou rely on your teacher to make sure you know everything.” According to Bert, “It’s not necessarily the individual’s fault,” if they are unsuccessful on the test. She added, “It could be the teacher.” Bert said, “you can’t prepare for it yourself, you have to rely on teachers, so it’s kind of not fair that they are evaluating you for what teachers may not have taught you.”

Bert also explained that she does not see the value in having all students complete the same test when they are not all going to be pursuing the same careers. Bert did not seem to know or understand what makes the particular skills being measured through the testing context essential for all students. Bert wrote, “Not everyone wants to be a journalist therefore the newspaper article is irrelevant. Same with essays or reading comprehension.” Bert repeated many times that “not everyone is going to go into journaling” or journalism, and so she did not understand why all students all have to know how to write a news report. She also stated, “Not everyone’s going to wanna like, be a professor, so why do we need to write essays. If you’re working at McDonald’s, why’s this test important to you?” Despite successfully completing the literacy test, based on Bert’s contributions to the study, Bert did not seem to be aware of which skills she has in particular that were measured through the literacy test, why she supposedly needs to have those particular skills, or how they might be relevant to her life. Bert stated:

I guess [I] just sort of assumed that all the criteria is making sure, for like the article, making sure that you have your ‘who, what, when, where,’ in your open thing and then like the ‘how,’ in your body paragraphs and then quotes and whatever, and then your essay, like your topic sentence, introductory, and like all the criteria for like essays. I guess it’s just assessing that you know that.

Bert did not mention anything about critical thinking skills, persuasion or argumentation, what it means to state and support ideas, or why someone might want to use this strategy when writing. Structural and organizational moves in writing are strategic choices and part of a decision-making process, but this does not seem to be something that Bert focused on in this instance. It is possible Bert has learned a certain procedure about how to compose a particular genre of text, such as a news article, as reflected in her explanation, and the literacy test was an opportunity for her to demonstrate that she can repeat the composition process she is expected to have learned.

The Case of Oliver Humphry



Oliver participated in the research study in collaboration with the school research site (Research Site 1). He was a Grade 12 student taking college preparation English (ENG4C). In terms of course marks, Oliver said:

I'm think like a low 70s, cause I'm not horrible at English, but I can't go and write a full storybook, [. . .] you'd have to go through it with three people that are perfect with grammar and go right through it.

Oliver said he took academic-level English courses in Grades 9 and 10, receiving, he said, "an 86" in Grade 10. Oliver suggested that the teacher he had was in part the reason he received a high mark; however, he added, "I also

did a lot more work in that class than I have ever done in an English class." English is Oliver's first language. Oliver said he uses Facebook, which is a social media site, to send messages to his mother and brother who live in another province. According to Oliver, "It's a good way to keep in contact with everybody that is not here." Old cars and motorcycles interest Oliver. He also listed "friends, TV/video games, [and] reading" as interests or hobbies, and he likes classic rock music. For video games, he said he plays "a little bit of racing. More fighting than anything." Oliver likes "action, thriller, [and] comedy movies/novels." He also said, "reading is good for passing the time." Oliver's stated approach and view on life is "live and let live." At school, Oliver was a member of the audio-visual team that helped "run the assemblies" and that supported school activities, like the school play. He explained, "We do lighting. We do sound. We make it look pretty." Oliver said he does not "miss school," meaning he is never absent. He is "always in class." After school, Oliver worked at a grocery store part-time. After high school, he said he planned to go to college for film school, and he said he had been successfully admitted to his program of choice.

Understandings and Experiences: Literacies. Throughout the project, Oliver defined literacy as "the capability of reading and writing." He also expanded this definition to add that literacy is "understand[ing] [. . .] a language which the common people use." Oliver mentioned that listening and seeing can be incorporated into his understanding of literacies. Oliver did state though, "I've never actually been told what a literacy is." He said, "They just go, 'Here's the test. Write it. This is what it's called.' And they don't actually tell you what a literacy is." Oliver said he believed that "people that are capable of reading and writing in a understandable format are

the ones that have literacy skills.” He noted that literacy skills are “important to be able to communicate with others.” Thus, Oliver’s literacy goal was to “read and write understandably.”

When listing literacy skills he believes he has, Oliver wrote, “reading; writing; understanding reading.” For the skills he struggles with, he listed rhymes, and for the skills he would like to improve, he listed riddles (see Figure 26). Although Oliver identified specific genres of texts, rather than the skills required to make sense of those particular types of texts, Oliver explained his understanding that certain tasks, such as reading “little clues [in books] that you wouldn’t catch onto unless you paid attention really well,” require a certain level of attention, awareness, and skill. Other than this reference to the clues in books, Oliver did not often speak about sub-sets of skills that could clarify what might be needed for an individual to be able to, for instance, read, write, speak, listen, or communicate and understand though.

Literacy skills you have:	Literacy skills you struggle with or find more challenging:	Literacy skills you want to improve:
reading writing understanding reading	rhymes	riddles

Figure 26. An Excerpt of Oliver’s Literacies Graphic Organizer

Oliver provided many different examples of how he might engage with literacies in his daily life. He also noted that the activities he was doing in the context of this study relate to literacies when he noted, “frankly there’s a lot of that in this, and games, all of that stuff.” Oliver contributed seven photographs to the study that capture his experiences with literacies, including photographs of video games and movies, a book opened to a page, and an emergency door sign on a school bus, which illustrate how he engages with literacies in his daily life. Oliver also contributed a photograph of his backpack with the photograph zoomed in on the brand name, so it is possible he was emphasizing the word on the bag. There was also a photograph of Oliver reading with a friend on the school bus and two photographs of Oliver’s friends on the bus. Describing his photographs, Oliver stated, “These are the times and places that I read in the day. I didn’t get work, cause work is just my name and an abbreviation of each day.” Oliver explained that the book being held in one of the photographs is a book his friend was reading, but, he said, “little books like that is what I usually read.” Referring to the emergency sign on the bus window

(see Figure 27), he added, “And then just little pointless things like that is usually what I see in my day.” When it comes to video games, Oliver explained that literacies are used when “reading the instructions for missions” or when reading the subtitles. Oliver also listed board games and reading the instruction manuals in particular and “writing to friends on email or [F]acebook” as examples of how he uses literacies and what he thinks literacies look like. He also said he uses literacies when writing resumes and incident reports, which he explained they practiced writing in his English course along with other types of letter writing.



Figure 27. Oliver’s Photograph of the School Bus Emergency Door Sign

Oliver said that he likes to read and he spoke quite a bit about some of the books he enjoys. In his journal, he wrote that reading is “something that I do every day of my life.” He likes books that “pull you in within the first couple of pages” and that appeal to his interests. He also explained that he enjoys series of books and short texts rather than really long novels. Oliver said he likes to read on the bus with friends, and he said he even bought a book from the grocery store recently where he works part-time. Oliver was surprised that the grocery store sold books, but he was quite pleased with the one he picked. Oliver said that he never reads the newspaper, but he does read the cartoons, or “the funnies,” and he also does the word searches and puzzles that are included in the paper. He said, “Everything else, it’s just words on a page, and I don’t care for it.” Oliver stated though that “reading is good for passing the time.” He explained that he does find reading to be challenging because of his dyslexia, but he likes when he can ‘stop’ and ‘take his time.’

When discussing reading and writing, Oliver explained that he has an Individual Education Plan (IEP): “Oh yes, I have an IEP. I don’t use it very often, because I try and get by without it, but if I’m having an extreme amount of trouble, then I do go to it.” “I mix letters up in words.” Oliver explained, “[A]t least with reading, even with dyslexia, I can stop and take my time.”

However, writing is more challenging and ‘confusing’ for Oliver. I asked Oliver what he thinks he would need to make writing less confusing, and what might help him excel at writing, and he replied, “I would need someone to strap me down and pump a [. . .] load of Ritalin into my veins and keep me there for at least twenty-four hours a day with an English board in front of me.”

Alternatively, he said, he would need someone to correct his errors over and over again because it takes time for him to realize how something is expected to be done and why it might ‘make sense’ to write in a certain manner:

I know I’m going to make the mistake again, because [of] my past history. . . . Mistakes happen and happen and happen, until . . . 15th, 16th time they happen and I go, ‘Oh, I shouldn’t do this. That’s bad.’ Or I go, ‘Oh, that makes sense.’ But it’ll take a while for me to catch on [. . .] I’m perfectly fine with the teacher coming up and being like this is wrong. As long as they don’t make a huge deal about it, they are not loud about it. Because frankly, I get made fun of enough as it is. I don’t need to be getting made fun of for being dyslexic or not knowing how to write properly.

Oliver’s comments suggest that developing particular writing skills takes time for him, and it is a learning process that requires ongoing support that is perhaps most effective when it blends in with the flow of the classroom.

When reviewing the artefacts submitted by Oliver, although I observed typographical errors as I read and attempted to replicate his written words, I also developed a sense that he had given considerable thought to the questions to which he was responding. I also found his responses were quite critical serving as evidence of his critical thought and his unique voice. It was important to focus on making meaning and seeking to understand how Oliver was engaging with literacies in perhaps powerful ways, despite sometimes colliding with conventions. Oliver also layered texts in intriguing ways on the graffiti walls in particular when he structured one of his contributions in the style of a question and an answer (Q and A) (see Figure 28).

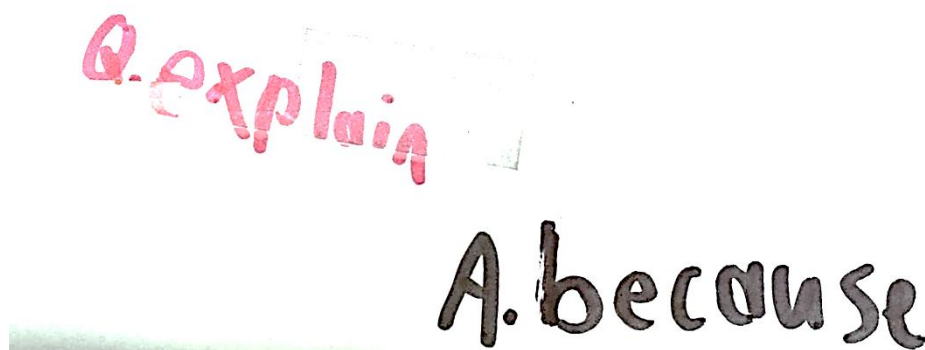


Figure 28. Q and A on the “OSSLT” Graffiti Wall – Contribution by Oliver

This question and answer was written alongside a large red “NO!” (McCormick & Trejo, 2013), which Oliver found and cut out of one of the provided print media texts. Oliver also painted the phrase, “I read It NOT Write it” on top of a newspaper article. He painted his phrase in black and then outlined it with blue, perhaps to make the black text further stand out in contrast to the newspaper print. Oliver also created an acrostic poem using the name of the ‘OSSLT,’ which he wrote on top of an image he selected. The excerpt of the image includes a person, cropped at the waist, standing on interlocking stones (see McCormick & Trejo, 2013). Oliver turned the image sideways, and wrote the poem on top of the image. Although the image is black and white, Oliver wrote his text in coloured markers: “Obviously. / Soal. / Sucking. / Lies. / To date,” with each line in a different colour in the following order: Black, Green, Purple, Red, and Brown. Oliver also used letters in unorthodox ways to pose the questions, “HWY?” and “C^N U R3ad +H1\$,” which are presented in the section that follows focusing on the literacy test. The creative and textual space made available through the graffiti walls activity seemed to work well for Oliver who engaged with many of the materials provided in textually unique ways. These artefacts are an indication of what literacy engagement can look like for Oliver in ways that are more difficult to observe through other modes. Oliver did not contribute much to the “Literacies” graffiti wall in comparison to the “OSSLT” graffiti wall. On the “Literacies” graffiti wall, Oliver’s only contribution was made not using the materials provided. Instead, Oliver took a pack of gum he had in his pocket, took a piece of gum to have, tore the front flap off the pack, and then attached that part of the gum package to the graffiti wall. He did not comment on this contribution. When I asked Oliver if he knew what critical literacies are, he indicated that he was not familiar with the term at all.

When talking about the purpose of literacies, Oliver noted that reading and writing are essential for one’s “safety” and general “awareness,” including being able to read caution signs and “bus stop signs, or stop signs, or billboards, or magazines, or anything like that.” Oliver explained that the purpose of literacy skills is “To understand the modern world and how it runs.” Oliver noted that being able to read can help us learn and “find out things that nobody else is willing to speak of [. . .] Like Harry Potter, he goes to the forbidden section of the library to find something that no one’s willing to talk about.” In this case, being able to read provided an individual with privileged access to knowledge and access to opportunities to learn that might be

more difficult to come by otherwise. Oliver noted though that there are limits to what he feels he needs to know how to be able to do. He explained:

Like if I look at the sheet, [and] I can read it and understand it. That's as far as I'm willing to take my reading. But if you put something like a huge chemical formula from science or anything. I'll look at it and go, "I'm done."

Oliver's collection of examples of reading and writing reflect a broad range of text types. The different examples of texts that Oliver highlighted throughout his contributions to the study suggest that Oliver recognizes how reading and writing relate to many aspects of life. The majority of Oliver's examples of how he engages with literacies are situated in an out-of-school context rather than what reading and writing might look like in a classroom learning environment.

When reflecting on his literacy education experiences at school, Oliver expressed that there was a disconnect between what was expected of him at school and what 'real life' is actually like. During an interview, I asked Oliver if there were any pages in his journal that he was interested in talking about, and one of the pages he selected was the character sketch (see Figure 29). When talking about this page, Oliver explained that he contrasted what was expected of him at school with how he perceives real life. He said that school makes it seem like 'life or the world,' which is represented as "a huge hulking beast of a person," has expectations, including writing "a seven-page news article" or knowing "Pythagorean Theorem inside, outside, frontwards, backwards, upside," that you must meet or else "there's no way you are going anywhere in life." In real life though, the figure representing life or the world is "about the same size" as Oliver, who is represented as a "little stick figure." Oliver explained:

Life says, "Do you understand me?" And I look at him and say, "Yes, I do." Life looks back and says, "K, you'll do great. Cause frankly, all it really is, is understanding the basics. Yes, we do need to learn how to read and write. But when someone asks you for your opinion on something you have no opinion of, you can't look at them and speak seven paragraphs, or three paragraphs. You look at them and you say, "I'm sorry. I don't have an opinion on that." And they don't look at you and get all mad at you and fail you, if you don't have an opinion. They look at you and go, "Okay. I guess that's just the way you are." But if I fail Grade 12 because I don't have an opinion on something, that damages my record, because I don't have an opinion on it. Which stops me from going to school afterwards, which stops me from getting a job, which is completely unfair in the eyes of me.



Figure 29. Oliver's Journal: A Character Sketch

Oliver expressed his belief that the standards and expectations established and enforced at school are not realistic or representative of 'real life' outside of the school context. He explained:

Nowhere will I ever need Pythagorean Theorem or need to write a seven-page English essay. And if I do, well I will come back, and I will shake the hand of every single person that made me write this, and I will apologize sincerely. And I might even write a seven-page letter for them.

Oliver expressed how he did not see value in some of the tasks he was expected to complete at school. For Oliver, not being able to meet the expectations imposed at school did not seem 'fair.' Oliver stated that he recognizes that you "need to learn to read and write," but he explained that the ways in which those skills are being measured at school do not always provide him with sufficient opportunities to engage and demonstrate his skills, such as when he is asked for an opinion on a topic for which he does not feel he has an opinion. In the case of the OSSLT in particular, it is through on-demand, or on-the-spot, demonstrations of skills with little time for thought, reflection, discussion, or the consultation of resources that students are asked to engage and demonstrate their skills. Oliver did not seem to think writing an essay or a news report was

an accurate representation of how he understands literacy engagement to unfold in everyday life. In his journal, in response to the prompt “Are you literate? How do you know?” Oliver wrote, “I read and wrote in this book” (see Figure 30). This comment demonstrates that Oliver believes he is literate, and also that he based his belief and this judgement on his own self-assessment. Oliver’s experience working on the journal was evidence enough for him that he is literate.

Are you literate?
How do you know?
I read and wrote in this book.

Figure 30. Oliver’s Journal: “Are you literate?”

Understandings and Experiences: OSSLT. Oliver wrote the literacy test in Grade 10 and was unsuccessful, failing “by five marks.” In Grade 11, he wrote the literacy test again, and he failed “by two marks.” Oliver successfully completed the Ontario Secondary School Literacy Course (OSSLC) in the Fall semester of Grade 12. I asked Oliver why he thinks he had to write the literacy test, and he replied, “I’m not really sure. It kind of seems pointless.” According to Oliver, “The test is a pointless wreck that makes the people that fail feel bad, and the people that pass don’t care” (see Figure 31). Oliver’s suggestion was to “get rid of it.” Oliver said that the first time he wrote the test and received an unsuccessful result, he said, “Okay, I’m kind of going to need to work on this,” and he said he did “put a fair bit of effort into it again on the second try.” However, when he received another failing mark, he said, “it put the thought in my mind that I really don’t care.” Oliver explained that, after working hard to improve and still not passing the test, he no longer wanted to continue trying to improve his skills. He said that he did not think they would pass him on the test next time either.

d) What do you value about the OSSLT? Is the test itself important? Which parts or aspects of the test are important? Why? No, it is not important. If I pass my english class why do I need to pass this test if I can both read and write. The test is a pointless wreck that makes the people that fail feel bad and the people that pass don't care.

Figure 31. Value of the OSSLT According to Oliver (Graffiti Walls Handout)

When critiquing the literacy test, which he refers to as a “foul, cruel monstrosity,” Oliver questioned how the “goal” of the literacy test is different from that of an English course. He felt

that his writing was “marked ten times harder” on the literacy test than it would be marked in the course. Oliver said he has passed “every single English class” that he has taken, so he found it puzzling that he did not seem to be able to pass the literacy test. Oliver wondered, “Could they not take a look” at all the assignments he had completed in his courses “throughout the entire year” instead of basing an important decision on a single test. Oliver explained that he thought passing an English course with “a reasonable mark” should mean that a student has satisfactory reading and writing skills. He said that if they were not “marking it harder,” then he must be making a lot of errors with his writing, which he said was possible because of the pressure to write quickly to be able to complete the test in the allotted time. Oliver stated:

Well, they mark it harder apparently, because I’ve passed every single English class that I’ve had, and I’ve failed this twice. So, I’m guessing they’re marking it harder, or that day I just go . . . and spell every third word incorrect, which is completely a possibility, because sometimes I switch letters when I’m writing, but that’s because I’m writing so fast, and I’m thinking the letter that is three letters ahead.

Misspelling words was one of the reasons why Oliver said he thought he failed the test. On the “OSSLT” graffiti wall, Oliver played with the placement of letters in words to illustrate this thinking (see Figure 32 and Figure 33).

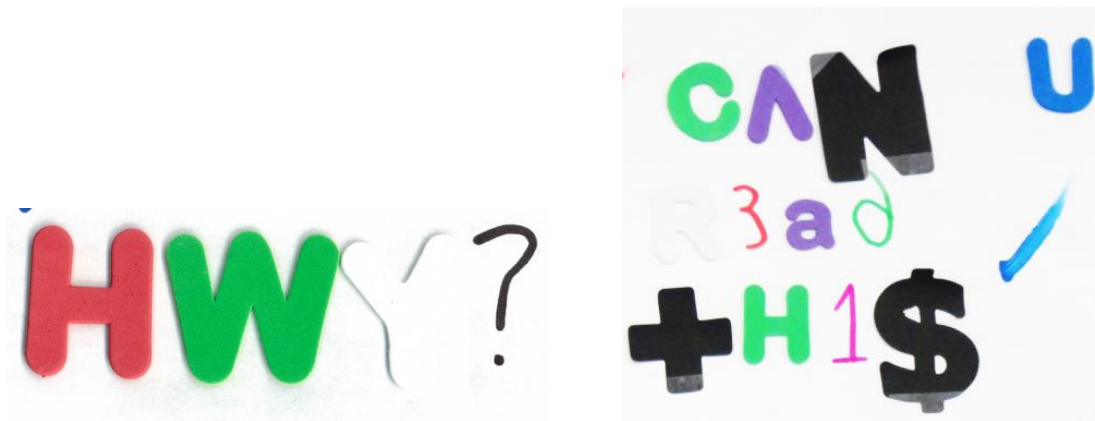


Figure 32. “HWY?” on the “OSSLT” Graffiti Wall – Contribution by Oliver [Left]

Figure 33. ‘C^N U R3ad +H1\$’ on the “OSSLT” Graffiti Wall – Contribution by Oliver [Right]

Oliver explained, “I spelt ‘why’ backwards [. . .] though it was purposefully.” Oliver contributed the smaller “neutral face” to the graffiti wall, but Bert then added the blue “Sob” and the teary face, saying “It needs to be crying,” to which Oliver replied, “No it doesn’t. It’s just a neutral face [. . .] That looks sad. I don’t cry very often.” Nearby, on the “OSSLT” graffiti wall, Oliver drew an arrow pointing to the word “guerilla” (Guerilla Group & CHUO FM 89.1, 2013),

which was spelt with an upside down ‘i,’ which he circled, to explain, “Errors like that make a fail” (see Figure 34). These comments and contributions suggest perhaps that, for Oliver, comprehension and being able to understand someone is more important than perfected script.

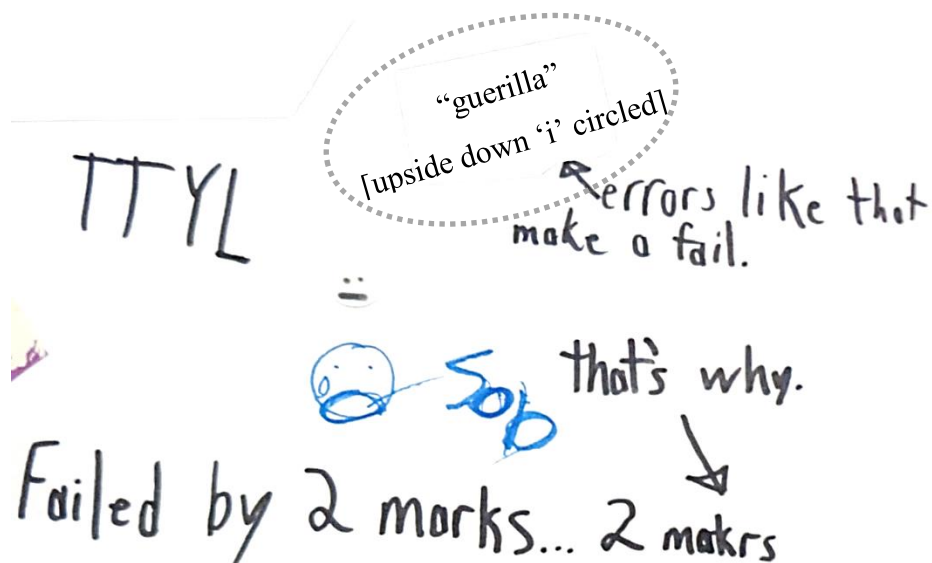


Figure 34. Guerilla Errors on the “OSSLT” Graffiti Wall – Contribution by Oliver

Note. Source for “guerilla”: Guerilla Group & CHUO FM 89.1 (2013).

Oliver critiqued the literacy test explaining that students are being asked “to do something the best” they can, but they are not being given the time to do so. Oliver explained that he “is a slow reader” and it takes him time to read and write his responses. He said, “It’s just ridiculous how they do it, in my opinion.” Oliver also said that being tested on something he last learned in Grade 9 is “kind of an unfair shot.” He said the content being tested should have been “taught about recently,” so that it was “fresh in the mind.” This critique suggests perhaps that Oliver might find it difficult to retain what he has learned from one year to the next. For someone who not only wrote the literacy test in Grade 10 but also in Grade 11, the gap between in-class instruction and testing becomes even greater. Oliver’s critique also suggests perhaps that he did not see a connection between the skills that were being measured and the skills he was continuing to develop and practice each year.

Oliver also questioned how the testing context was relevant to the “real world.” He stated that adults are not randomly asked “to write a newspaper article out of nowhere, or a three-page essay or a three-paragraph essay on polar bears.” Oliver also stated:

[T]here’s so many things the test doesn’t account for. It says we can’t have any help, but when we go into the real world, you can always turn to someone and say, “Hey, what is your opinion on this?” or “How would you do this?” The test completely gets rid of the opportunity

to do that. It's sort of all real-world scenarios and says this is it. This is the real-world, but around the real world is completely different.

Oliver said the test items are not phrased clearly enough, and sometimes clarification to make sense of what he was being asked to respond to on the test was needed. He said, "I don't know people that would ask questions in the form the test does." He added, "at least with a person, or in a class, you can stick your hand up and say, 'What do you mean by this?' or 'Can you explain, can you elaborate?' With the test, you can't do that apparently." For Oliver, the test was not reflective enough of reality, since, in everyday life, you can always ask someone a question, ask for help, and/or use resources to learn how to do something. Oliver also suggested the test was not representative of the skills he thinks he needs in life. He wrote, "I will never write a newsletter after I graduate. Why judge me on something I'm never going to do with my own free will?" Oliver questioned whether or not the individuals responsible for the test have experience writing comparable tests. He suggested that if they did have similar experiences, "they might think [. . .] it through more," and perhaps be more understanding. For Oliver, the point of literacy seemed to be being able to read, write, and understand one another. Oliver explained that literacy is "being able to read, write, and speak a language fluently enough to be understood." He stated, "I know how to read and I can write a sentence that you can understand." Although his sentences might not always be perfectly crafted, and he would need support to improve his written script, it seems as though Oliver thought it unfair that he would not be able to graduate with the skills he has developed.

Oliver was also quite critical of the literacy course. He explained that he did not think he benefitted much from the course:

I don't think it really did anything [. . .] Like, they had us do some reading, and they had us do a little bit of writing. It wasn't the teacher's fault that nothing really happened. It was the fact that the course was completely nothing. There was nothing to the course.

For the OSSLC, Oliver said he was given a book with stories and questions to answer. He did not think the level of difficulty of the questions in the book compared to that of the literacy test:

The questions in the book were nothing like the questions on the test [. . .] The questions on the test would have this really long question, very confusing, really big words. And then the questions in the book were . . . like . . . "What colour of shirt was he wearing?" [. . .] And then sometimes there would be a long answer question where you would have to write a fair bit for it, but it still wasn't nearly as hard as the OSSLT.

Oliver did admit that his “writing might have gone up” after having completed the course, but he did not think that would be something that could help him pass the literacy test. He explained:

My writing might have gone up, but I don’t think it would have . . . drastically changed much because most of the reason I failed is because I didn’t write as much. It’s because [. . .] when someone says, “Write about this.” I go, “Okay,” and I write about it, but I write as much as I need to, and I write as much as I can think. I don’t go, “Okay, I’m just going to [. . .] [make up] the whole thing,” and just write a whole bunch of nonsense. I’m going to write what’s there, and then I’m just going to end it.

Oliver was quite firm about not making up or crafting inauthentic responses. Reviewing a sample OSSLT question for the opinion piece, Oliver stated, “I don’t have an opinion on this [. . .] And I can’t write three paragraphs about how I don’t care. So really, what the teachers are asking you to do is totally [. . .] [make up] the whole thing.” Oliver explained that, because he did not have much to say in response to some of the provided topics on the test, his answers to some of the test questions were quite short. Oliver said he was not interested in writing “a whole bunch of nonsense.” Oliver’s resistance to writing inauthentic or meaningless texts is evidence that he possibly believed that what he contributes and how he engages in literacies should be purposeful. Unfortunately, Oliver’s comments suggest that he did not view the literacy test as a meaningful or purposeful literacy context. The literacy tasks on the test are strictly for evaluation purposes. Oliver even noted that he used sarcasm in his responses to questions that he perceived to be “ridiculous” and far too simple or straightforward. He suggested that he would prefer to have had the opportunity to engage with test items “where you need to think about it,” and where you can “sit back” and “relax,” and actually think about the response you are going to be writing. Oliver mentioned that he hoped including sarcasm in some of his responses would make “the people who are going to read” his response to a particular question realize that the question “was kind of a stupid question.”

As a result of having to take the literacy course to satisfy the literacy graduation requirement, Oliver had to change his Grade 12 course load for both semesters of his final year of high school. In order to accommodate taking the literacy course, Oliver said he had to switch out of a few of the courses he was interested in taking. He said he was hoping to take a specific section of Grade 12 college preparation English (ENG4C) with a teacher he was “comfortable with.” He explained:

I know what they expect of me, and I know how they act, and I know how to stay on their good side, and not be one of the students that gets hardly marked. Like not saying that's biased or anything, just I prefer to stay on everyone's good side, and I've never been taught by this teacher that I'm being taught by now in English class, and it's turning out alright, but still.

Instead of taking ENG4C during the first semester with the teacher he was hoping to have, Oliver took the literacy course during the first semester of Grade 12, and he took ENG4C during the second semester with a teacher he was not familiar with. Oliver also ended up having to add Drama and Music to his schedule. Oliver was quite positive when discussing the outcomes of these courses, and how they worked out for him. He said the courses "did turn out quite well though." Oliver said he now knows how to play the guitar. He said, "It's quite nice." Regarding Drama, he said, "I don't know. I've always found myself to be quite a dramatic sort. But I don't know. You're going to have to ask the other two [referring to Cadi and Bert who were in the same class as Oliver]." Oliver continued, "I try not to judge myself or my own attributes. I try and let everybody else [?], so I can hear what they think." When I asked him if he enjoyed the course, he added, "It was nice. It was a good learning experience." While he was not pleased that he had to change his courses around, Oliver managed to make the best out of the situation.

Reflecting on the Case Overviews

The participants' understandings and their experiences of both literacies and the literacy test were carefully considered through each of the case overviews. As demonstrated across even the three case overviews presented in this chapter, it seems as though the participants were working on developing their abstract understandings of literacy. When reporting on how they experience and engage with literacies, there were many aspects of their experiences and engagements that the participants did not metacognitively acknowledge or highlight as being related to literacies. This observation complements a finding of Van De Wal's (2012) study of students' perceptions of literacy after having taken the Ontario literacy course. Van De Wal (2012) observed that "there seemed to be a disconnect between how the students defined literacy using words and how their actions demonstrated a different and broader definition of literacy" (p. 57). In the chapters that follow, elements of the proposed critical literacies construct have been applied to the participants' engagements to show that the participants do engage in ways that are harmonious with the proposed literacy construct. When it came to articulating how they themselves are understanding literacies, much of the language of critical literacies presented in the proposed

construct (i.e., the significance of engaging by questioning, critically analyzing, critically responding, as well as acting and reflecting) was, for the most part, not reflected in the participants' articulations of what literacy entails. The ways in which the participants were reporting understanding and experiencing both literacies and the literacy test, as outlined generally in the case overviews, suggests that there are potential construct-related outcomes of learning about and engaging with literacies in an educational context that includes a high-stakes literacy test that is based on a limited literacy construct. In the next two chapters, I present the results of this study filtered more precisely through the sub-questions guiding the inquiry.

CHAPTER 7. MULTIPLE CASE AND CROSS-CASE ANALYSES: CRITICAL LITERACIES IN AN EDUCATIONAL CONTEXT THAT INCLUDES THE OSSLT

In this chapter, I present the findings of the multiple case study in response to the sub-questions that align with the first central research question. The first central research question and the associated sub-questions are as follows: “What are students learning about critical literacies in an educational context that includes the OSSLT?”

- How are students understanding and conceptualizing literacies?
- How do students relate their life experiences to literacies and/or to critical literacies?
- Where do critical literacies fit within students’ conceptualizations and/or experiences of literacies?
- Who/What do students say influences their understandings and their experiences of literacies?
- Do students say they value literacy skills?

Throughout this chapter, I present what each of the ten cases contributes to this line of inquiry. I also present the findings of the cross-case analysis to demonstrate how reading across the multiple cases can further enrich understandings in line with the sub-questions shaping this line of inquiry. In Chapter 8, I present the findings that correspond with the sub-questions forming the second line of inquiry, and, in Chapter 9, I synthesize the findings, and I discuss the two central research questions.

Understanding and Conceptualizing Literacies

In this section, I present the ways in which the participants abstractly defined literacy and/or literacies using words. I begin by presenting a collective literacies construct I developed that illustrates what each individual participant contributed and that illustrates the parameters of the participants’ understandings. I then present the findings from the graffiti walls specifically, which provided the participants with a space to articulate their understandings collectively. The concepts of reading and writing seemed to feature prominently in almost all of the participants’ word-based and abstractly defined understandings of literacy; thus, I clarify how the participants seemed to be using these two terms throughout the study.

It is important to note that despite wanting to capture the participants’ current understanding of what literacies entail, in most cases, it seemed as though the participants were still figuring out and trying to decide what literacy might entail. Many of the participants seemed to be working

through what they had learned from different sources, including their courses at school and also what they were experiencing in relation to the literacy test. The participants were contrasting the ways in which literacy seemed to exist in these different contexts with their own thoughts and their lived experiences. How the participants made connections with their experiences as an alternative way of presenting their understandings and also their experiences with literacy and/or literacies is presented in a section that follows. I also present the findings of how the participants discussed their potential literacy influences in a later section, which is the focus of another one of the sub-questions.

There was no fixed understanding of literacy that was uniformly or consistently conveyed by all of the participants. The participants demonstrated a considerable amount of shifting between different possible articulations and representations of literacy. The extent to which the participants seemed to still be working through and practicing how to talk about literacy was concerning given that they had all completed a high-stakes literacy test. If literacy is considered to be so important for youth today, such that a high-stakes test is needed to ensure that Ontario students have developed and can demonstrate particular skills prior to graduation, Ontario students should be learning what literacy means. It would also be reasonable to expect students to know and understand which skills in particular are being valued and why and how they can continue developing and working on improving those skills as well as their other literacy skills.

The following are three examples where a participant indicated not being certain how to explain literacy. When reading a prompt in the journal, Ella stated, “I don’t understand when it says ‘What do literacies look like?’” Porsche’s response to this journal prompt was, “I don’t know! An old, wise, boring man?” (see Figure 35). Oliver also often said, “I don’t know” when responding to prompts or questions included in the research activities. Oliver even said, “I’ve never actually been told what a literacy is.” He continued:

They just go, “Here’s the test, write it, this is what it’s called.” And they don’t actually tell you what a literacy is. So, when someone says, “Literacies are dot dot dot,” [which was a prompt in the journal], or with a question mark, or “What are they?” I go, “Oh, let me think about that, wait a minute, has anyone actually told me? Has anyone ever actually planted the seed of an idea? Am I just supposed to come up with this on my own?”

While it was concerning that many of the participants demonstrated that they were uncertain when talking about the concept of ‘literacy,’ it was reassuring to observe how they were able and willing to pause, to reflect, and to consider developing and/or expanding their understandings.

What do literacies look like?

I don't know!

An old wise boring
man?

Figure 35. Porsche's Journal: "What do literacies look like?"

Organizing a Collective Literacies Construct: Working With Words. Each participant contributed an array of literacy-associated words throughout the study to explain what they believe literacy entails. Figure 36 presents a compiled collective literacy construct that summarizes what I have learned from the participants and from reading across the ten cases. It is important to remember that each participant did not offer this full construct. Instead, this is what all of their individual contributions amount to when amalgamated as a potential collective construct. The collective literacy construct situates all of the contributions in terms of one another making it possible to read across the set of definitions in a unique manner. The attribution of particular contributions to specific characters (see Figure 37) is intended to make it possible to distinguish between what the different participants contributed to this collective construct. My goal in presenting a collective construct is not to claim that all of the participants would necessarily be in agreement about all aspects of this construct; my goal is to see the parameters of what was shared and to begin to see common gaps and omissions in the definitions of literacies the participants were sharing.

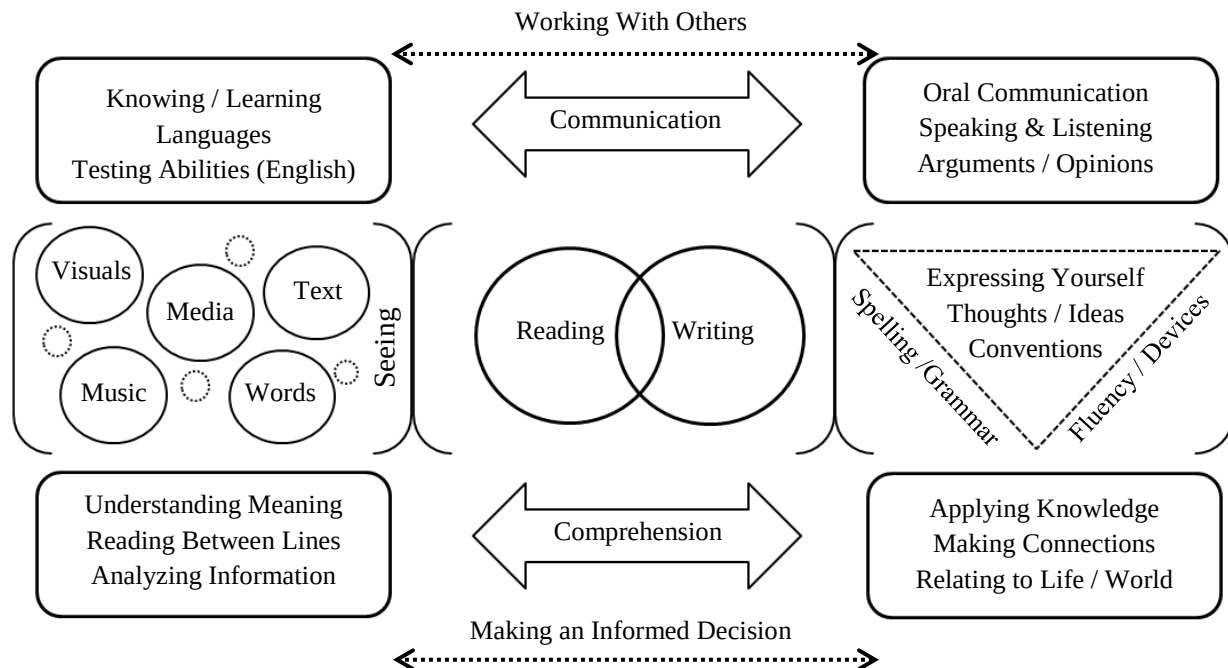


Figure 36. Compiled Collective Literacy Construct

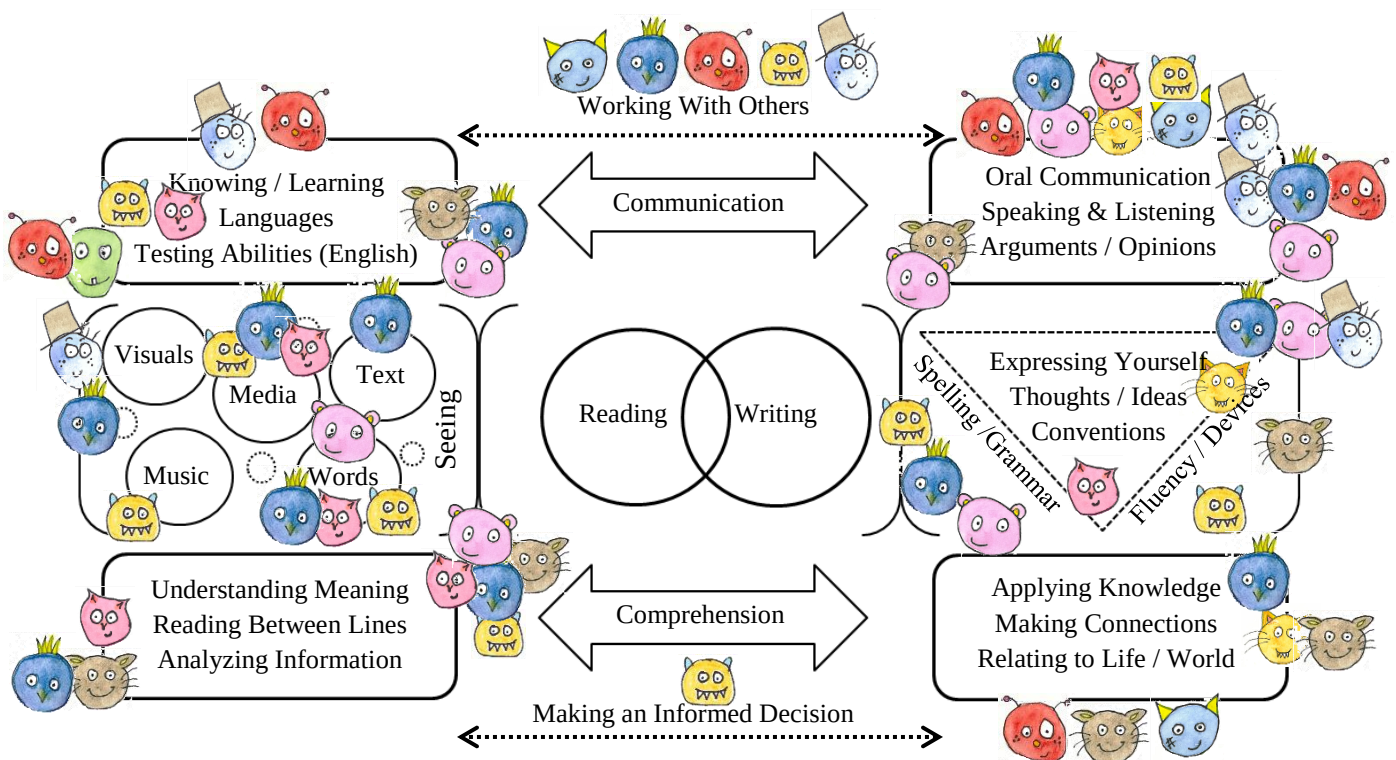


Figure 37. Compiled Collective Literacy Construct With Attribution of Contributions

I positioned reading and writing at the center of the collective literacy construct to reflect how these two concepts seemed to be the most defined and prominent way in which the participants articulated their understandings of the term literacy. The quick response offered by most of the participants in response to the question ‘What is literacy?’ often seemed to be ‘reading and writing,’ as though that was a familiar and comfortable response to share. The two concepts of writing and reading appeared to be the core recurring references that most of the participants associated with a concept of literacy. These are also the two terms that the literacy graduation requirement and the literacy test explicitly use when talking about evaluating students’ literacy skills. All of the participants defined literacies as writing, and everyone, except for Finn and Cora, defined literacies explicitly as reading. Both Finn and Cora mentioned reading in conversations about literacy, but the relationship between these concepts and how reading relates to how they were understanding literacy was not clear. The photographs that Finn contributed to the study, which were intended to reflect his understandings of literacy included bulletin boards. When discussing the photographs, Finn mentioned learning to read and write words by seeing the bulletin boards around the youth program site, since the bulletin boards were covered with examples of texts. Finn’s focus seemed to primarily be on his ability to write and to compose texts though. Cora mentioned that although she does not read a lot on her own independently from her courses at school, when she read books for her English courses, she found that they helped her learn English. When Cora spoke about literacy, her primary focus seemed to be on her experiences learning the English language.

Even though reading and writing are positioned at the center of the construct, Cadi’s realization that literacy “really is much more than that” is reflective of how many of the participants moved beyond this somewhat narrow definition of literacy. Cadi eventually even said, “it’s basically everything.” Throughout the project, the participants also did not really unpack the idea of literacy versus literacies as something being pluralized though, despite my use of both of these terms at different times. The participants did not question or challenge the different ways in which I was writing these terms on the handouts or on the graffiti wall, where I chose to write “Literacies” rather than “Literacy.”

Two other overarching concepts that seemed to relate to many of the participants’ understandings of literacies were communication and comprehension. Communication and comprehension are broader and more encompassing concepts than the specifics of reading and

writing. These two concepts seemed to better reflect how the participants were situating both reading and writing as particular actions that have a purpose, which, for the participants, seemed to be either seeking to communicate or seeking to comprehend something. Finn, however, did not refer to either communication or comprehension or to any terms that seemed to closely relate to these terms. In addition to Finn, Anne and Cora did not use the term *communication* when explaining their understandings of literacy, but they did use other terms that relate to this concept. For example, Anne spoke about “expressing yourself,” and Cora referred to “talking” and putting thoughts and “ideas down on paper.” Five of the participants, namely Oliver, Donna, Anne, Porsche, and Ella, also did not use the term *comprehension*, but they all referred to *understanding*. Oliver used the term “reading comprehension” at least once when stating what he thought was being assessed through the literacy test. Thus, Oliver was familiar with the term *comprehension*, and he could have potentially integrated this term within his conceptualization and articulation of what literacy entails as well if he wanted.

In addition to these four concepts (i.e., writing, reading, communication, and comprehension), which seemed to recur across many of the participants’ word-based articulations of literacy, there were also numerous comments about languages, measuring skills and abilities, speaking, seeing diverse text formats when reading, and using conventions when writing and when speaking. The participants also commented on engaging with texts in different ways, including making connections between different contexts. The participants expanded their definitions and their conceptualizations in many ways.

In terms of communication, almost all of the participants, with the exception of Finn and Porsche, identified oral communication as being related to the concept of literacy. Oliver, Anne, and Sabrin also talked about listening. Porsche spoke about making arguments, and Ella noted that making arguments and sharing opinions is related to literacy, which relate to forms of communication. Oliver spoke about the importance of “understand[ing] [. . .] a language which the common people use,” and Sabrin spoke about the importance of learning English. Quite a few of the participants for whom English was not their first language aligned literacy with learning English. Cadi and Bert, on the other hand, considered using languages other than English in relation to literacy. Sabrin and Finn both thought that part of literacy was testing an individual’s skills to ensure each individual had an accepted level of linguistic proficiency. Finn even defined literacy as writing the literacy test (see Figure 38). Finn suggested that students

learn about literacies in “school,” and, on the graffiti walls handout, Finn wrote, “Teachers have literacy skills & Students Don’t” (see Figure 39). Anne, Porsche, and Ella also made comments that indicated that measurement was part of their understandings of literacy. Anne mentioned that the “stranth” of individuals’ literacy “may very,” Porsche suggested that “everyone have literacy skills but in different levels,” and Ella said that one’s use of literacy skills “shows [one’s] knowledge/understanding/intelligence.”

Question 2. What do the terms ‘literacy’ and/or ‘literacies’ mean to you?

The term "Literacy" means each year a dozen people partake in writing a Literacy test. Also it means if you fail the literacy test you have to write it a second time and if u fail the second time you have to take a course in grade 12.

Figure 38. Finn’s Definition of Literacy (Project Questionnaire)

a) How do you explain, define, or conceptualize literacies? What are they?

Who has literacy skills, who doesn’t, and why?

Teachers have literacy skills
 ↓
 Students don’t

Figure 39. Who Has Literacy Skills According to Finn (Graffiti Walls Handout)

In terms of comprehension, most of the participants emphasized the significance of understanding and of making sense of what they read, and they recognized that this is an important aspect of what literacy is all about. Applying knowledge, making connections, and/or relating what they read to other texts and/or to their lives when responding to texts was also important to the participants. The difference between communication and comprehension seemed to be the production and consumption of texts. Stepping back and looking at the full construct, a number of the participants seemed to recognize that literacies, specifically when

focusing on the communication aspects of the construct, emphasized that literacy is about ‘working with others.’ The aspects of the construct that relate to comprehension also seemed to align with Cadi’s contribution that literacy is about being able to “make an informed decision.”

The participants also referred to an array of text types and text features when explaining what literacy entails. There were references to visuals, media, and music, but Cadi seemed undecided about whether or not music should be included. Cadi, Bert, Anne, and Ella all emphasized words as being a significant part of literacy. Anne was the only participant that seemed to acknowledge that literacy is about engaging with any kind of text. Anne and Oliver both explained how visuals might relate to literacy. Oliver noted that if someone bought a bench that needed to be assembled, it would likely come with a manual including instructions explaining what to do, as well as a diagram that “helps explain what’s going on.” Being able to read and make sense of a diagram seemed to be something that Oliver associated with having literacy skills. Talking about watching movies and/or playing videos, Oliver also stated that “seeing” is part of literacy. Many of the participants also specifically referred to technical skills, including using accepted spelling and grammar and writing and/or speaking with fluency using well-crafted sentences. When expressing their understandings of what literacy entails through words, Anne, Ella, and Cora highlighted, more generally, that literacy is about expressing yourself and your thoughts effectively.

Alternative Collective Representations of Literacies: Working With Graffiti Walls. The “Literacies” graffiti walls created by the participants (see Figure 40 and Figure 41), which are covered in not only words but also images, echo and expand much of the thinking that is represented in the words-based collective literacy construct. Many of the words included in the collective construct, which were said in conversation or written on handouts or in the participants’ journals, were also written on the graffiti walls. In this section, I highlight how the participants seemed to be conceptualizing the term literacy through this collective text generation activity. Examples of literacy engagement are addressed in the following section exploring how the participants conveyed and illustrated their understandings of literacies through examples and experiences, in contrast to how they seemed to be defining the term. Table 19 and Table 20 present ordered lists of the items that were contributed to the graffiti walls by each participant to help illustrate how these walls came to be.

Table 19. *Alternative Mapping of the “Literacies” Graffiti Wall Contributions by Cadi, Bert, and Oliver*

Order	Item	Contributor	Order	Item	Contributor
1	Reading	Cadi	19	University Promotion	Bert
2	“Business” ^a	Bert	20	Gum Pack ‘S’	Oliver
3	A Legend for a Map	Bert	21	Colourful Plates/Dishes	Cadi
4	“Growing Education” ^b	Cadi	22	“This is a CD”	Bert
5	Map	Bert	23	‘Everything’	Bert
6	Cell Phones	Cadi	24	Girl Reading	Cadi
7	Crossword	Bert	25	An Open Book	Bert
8	‘Wrig. . .’ [Covered in Paint]	Cadi	26	Stacks of Books	Bert
9	Writing	Cadi and Bert	27	‘Archetypes’	Cadi
10	Hashtag Twitter	Bert	28	Star Wars Promotion; Yoda	Cadi
11	Architecture White Building	Bert	29	“Books”	Bert
12	‘Google’ Letters	Cadi	30	“Lyrics”	Bert
13	Money	Bert	31	Blue Check Marks	Cadi
14	Yellow Television	Bert	32	Yellow Dot Period	Bert
15	Orange Pencil	Bert	33	“Comprehension”	Bert
16	Person With Paintbrush: “You don’t need to stand up to make an impression” ^c	Cadi	34	“Conventions”	Bert
17	Red Check Marks	Bert	35	Price Sticker	Bert
18	Girl Writing	Cadi	36	Facebook	Bert

Notes. ^aGreat River Media, 2014; ^b“Growing Education” [Cover image], 2014; ^cPhillip Van Leeuwen, 2012, p. 100

Table 20. *Alternative Mapping of the “Literacies” Graffiti Wall Contributions by Porsche, Ella, and Cora*

Order	Item	Contributor	Order	Item	Contributor
1	Essential for Communication	Ella	9	Purple Center of Flower	Cora
2	“everyone has . . .”	Ella	10	Writing to Right of Flower	Ella [?]
3	“. . .with dif. levels”	Ella	11	[Version of Ella’s Name]	Cora
4	Underlining “everyone has . . .”	Cora	12	EkhsK [Painted Over to Make it Visible]	Ella
5	“. . . in”	Ella	13	Green Arcs Painted and Smudged [Not Covering Anything]	Ella
6	[Version of Cora’s Name] Palasht	Ella	14	Dots	Ella and Cora
7	Grass and Red Flower	Ella	15	Green Painted Over a Word [Unknown Word]	Cora
8	Yellow Sun	Cora			

Although the same assortment of supplies was available at each research site, the participants at both of the youth program sites chose to paint almost all of their contributions. When asked what the text in Farsi said, Ella said, “It’s like inside jokes. ‘How [Cora] does not like literacy.’”

Note that Finn and Anne did not have the opportunity to participate in the graffiti walls activity during the second session at Research Site 2, which was when these two participants participated in the project. Sabrin and Porsche had the opportunity to contribute to a “Literacies” graffiti wall during their respective research sessions at Research Site 3, but they decided to only contribute something to the “OSSLT” graffiti walls. Porsche asked, “Does it have to be positive?,” referring to what she could potentially contribute to the walls. Her suggestion was to “put white paint over ‘Literacies.’” One possible reading of this comment is that this might have been a suggestion to erase the word “Literacies,” since the wall at that point in time, other than the word “Literacies,” was entirely white, and painting white over the word “Literacies” would make this word blend into the background and disappear. Oliver’s only contribution to the “Literacies” graffiti wall at the school site was part of a chewing gum pack, which he did not comment on. Donna only contributed the words ‘reading’ and ‘writing’ to the “Literacies” graffiti wall during the first session at Research Site 2 (see Figure 42). Porsche seemed to resist contributing to a representation of what literacies might entail.

When provided with a collaborative and alternative space to represent what literacies entail, some of the participants continued to present word-based iterations of their understandings, which were reflected in the collective literacies construct, but some of the participants also practiced representing their understandings using mediums other than word-based languages. The four concepts presented in the collective literacies construct can be seen across the graffiti walls, which shows that most of the participants had opportunities to engage with these ideas, even if they were not the words they were contributing themselves.

Reading and Writing. In many instances, referring to reading and writing seemed to be the quick response that the participants were sure was associated with literacy; however, the participants often also continued to consider whether or not literacy could include anything else. Donna, for instance, frequently defined literacies as reading and writing. On the “Literacies” graffiti wall, in her journal, and on the project questionnaire, Donna only referred to reading and writing when defining literacies (see Figure 42, Figure 43, and Figure 44). Donna expanded her understanding of literacy when stating how she knows she is literate and when self-assessing her skills though (see Figure 45 and Figure 46). Donna listed oral communication, working with others, thinking, and numeracy as the literacy skills that she has, that she struggles with or finds challenging, and/or that she would like to improve.



Literacies are . . .

Reading
+
Writing

Figure 42. Donna's Contributions of "Writing" and "Reading" to the "Literacies" Graffiti Wall [Left]

Figure 43. Donna's Journal: "Literacies are . . ." [Right]

Question 2. What do the terms 'literacy' and/or 'literacies' mean to you?

To me literacy means the ability to
Read and write.

Figure 44. Donna's Definition of Literacy (Project Questionnaire)

Are you literate?
How do you know?

Yes because I know
how to read and write and
know oral communication

Figure 45. Donna's Journal: "Are you literate?"

Literacy skills you have:	Literacy skills you struggle with or find more challenging:	Literacy skills you want to improve:
Reading writing working with others	Numeracy Thinking	Oral communication

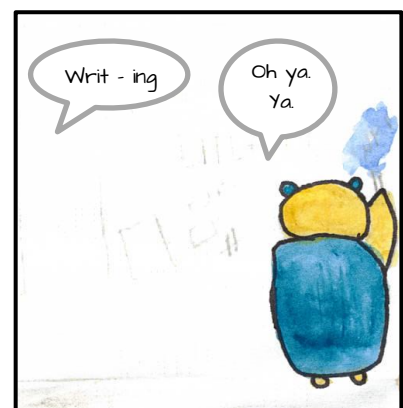
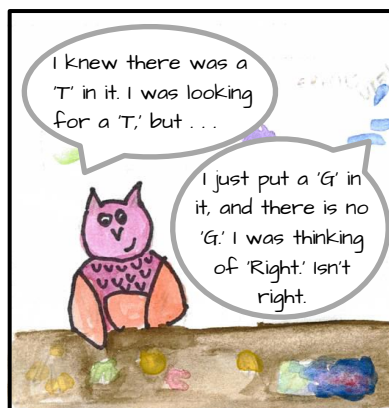
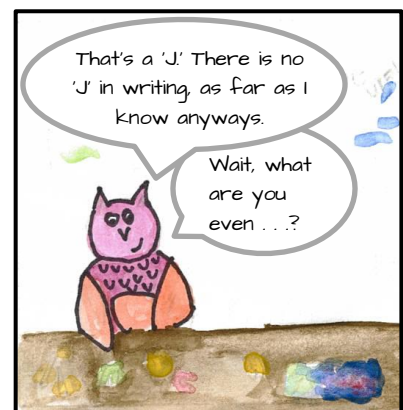
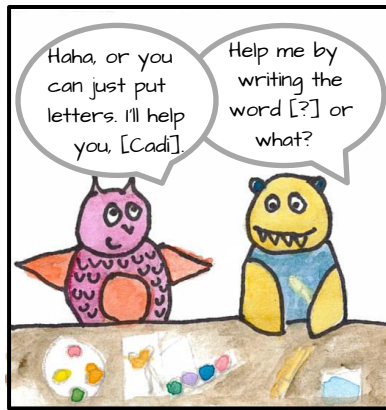
Figure 46. An Excerpt of Donna's Literacies Graphic Organizer

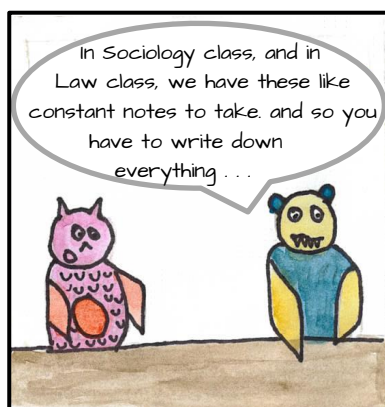
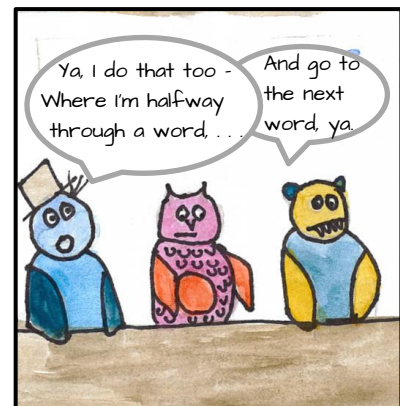
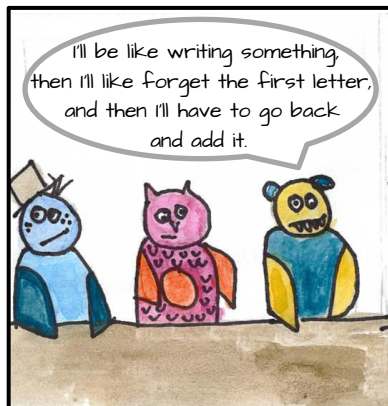
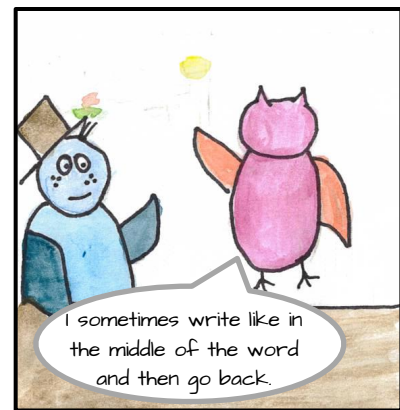
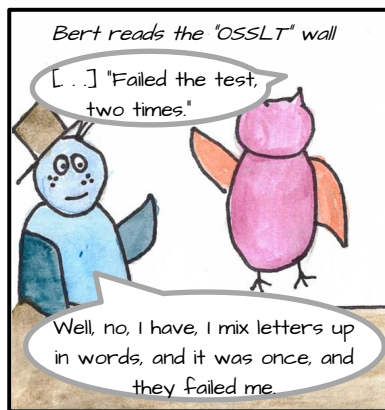
Since writing and reading were frequently mentioned by the participants, it is helpful to consider what in particular the participants seemed to focus on when they were thinking about and referring to writing and reading. While creating the graffiti walls, Cadi, Bert, and Oliver talked with one another about what they were contributing to the walls. When Cadi began adding the word *writing* to the “Literacies” graffiti wall, this provided the participants with an opportunity to comment on writing. Figure 47 presents the excerpt from the “Literacies” graffiti wall that sparked the discussion about writing, and Figure 48 illustrates the conversation that occurred between Cadi, Bert, and Oliver.



Figure 47. ‘Writing’ on the “Literacies” Graffiti Wall – Contribution by Cadi and Bert

When Cadi first started writing the word *writing* on the graffiti wall, she made a typographical error. She proceeded to paint over her word as a way of erasing the mistake. Bert suggested that Cadi put foam letters on the background, which would give Cadi another opportunity to add the word *writing* to the graffiti wall. Adding this word to the “Literacies” graffiti wall seemed to be something that Bert was supporting. As Bert was attempting to find the foam letters that could help spell the word *writing*, she went up to the “OSSLT” graffiti wall to read some of Oliver’s contributions. This initiated a conversation about spelling. Oliver, Bert, and Cadi all commented that they find it challenging to write conventionally correct and accepted texts. Cadi attributed some of her spelling struggles during this activity to being tired at the end of the school day, but she noted that when she has to write for a long time, such as writing notes in some of her classes, she stops editing her work. Throughout this conversation about writing, and while collaboratively composing a text, the participants only talked about spelling before moving on to another topic.





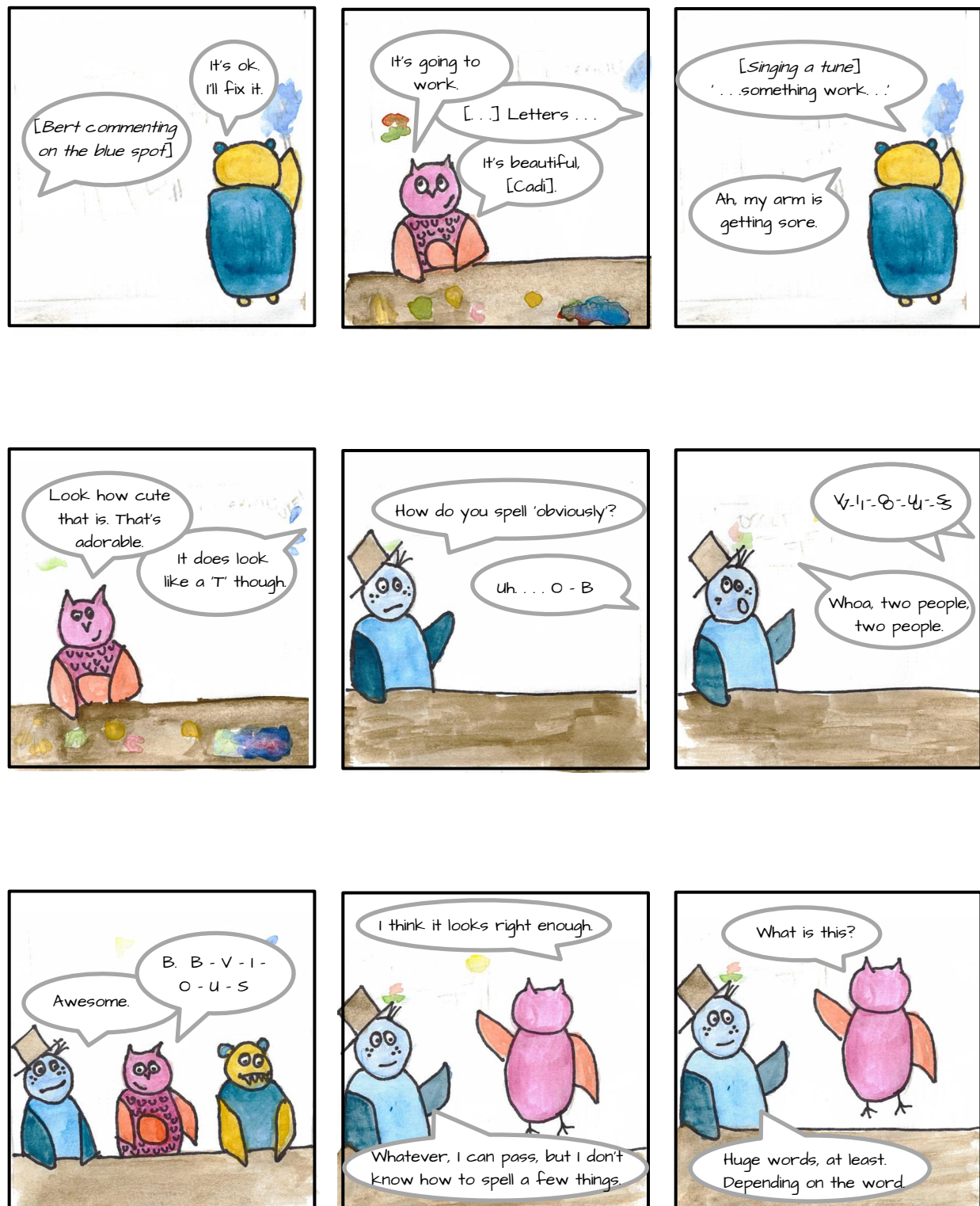


Figure 48. Conversation During the Graffiti Walls Creation Process With Oliver, Bert, and Cadi Presented as a Storyboard

The participants were also given an opportunity in their journals to respond to the prompts: “Writing is . . .” and “Reading is . . .” The participants’ engagement with these concepts helped clarify what the participants might be thinking of when they refer to literacy as reading and writing. Although Cadi, Bert, and Oliver focused only on spelling during the excerpt drawn from the graffiti walls activity, in their journals, they differently represented their understandings and thoughts about writing. Six of the ten participants contributed journals. Finn, Anne, Cora, and Sabrin did not submit journals. The six other participants explained writing as follows:

- “An important way to convey opinions, ideas, and information” (Cadi)
- “[P]utting down words; expressing thoughts; becoming or assuming another character (novels/songs etc); conventions; art”; Bert also drew a lined page and added a sticker of a pencil, attached an orange pompom to the page, and added stickers of a star and the words *nice* and *best* (Bert)
- “[T]roublesome” and “confusing” (Oliver; see Figure 49).
- “[B]oring” and “time taking” (Porsche)
- Essential; Ella wrote “Essential” on the previous page for reading, and then wrote “so is writing” (Ella)
- “To mark your beliefs and inspirations” and “To illustrate your understandings” (Donna; see Figure 50), which were phrases I had written on two of the tags that were attached to items in the research kit.

Writing is . . .

-troublesome.
-Confusing. → which witch is which
who cares?

Writing is . . .

To mark your beliefs
and inspirations

To illustrate your
understandings

Figure 49. Oliver’s Journal: “Writing is . . .” [Left]

Figure 50. Donna’s Journal: “Writing is . . .” [Right]

Based on the listed contributions, it seemed as though many of the participants understood writing to be about more than just the use of conventions. In fact, in their journals, none of the participants mentioned the use of conventions. During other research activities, many of the participants noted that they engaged in a wide variety of writing activities. Bert said she has written short stories and songs, Anne said she has tried to write short stories, Porsche said she has written a blog, Cadi said she has written book reviews online, and Finn said he has written news articles for the youth program.

The six participants who submitted a journal indicated that reading is:

- “An essential part of day to day life. Much of life centers on being able to read (advertisements, articles). Reading is important to transfer knowledge” (Cadi);
- “[M]aking sense of written words; understanding writing; ‘GREAT!!’, another dimension, Heaven, ‘Best!’” and it is aligned with books (Bert);
- “A necessary evil but at the same time it is good; Something that I do every day of my life” (Oliver);
- Two googly eyes and a yellow smile, which were made out of modelling clay, and a white page with lines that was also made out of modelling clay (Donna);
- “[I]mportant; a way of learning; interesting” (Porsche); and
- “Essential” (Ella).

Based on the listed contributions, it seemed as though many of the participants recognized the importance of being able to read. A few of the participants noted that reading is something that interests them, and many of the participants noted throughout the study that reading is something they do in their spare time. In her journal, in response to the prompt “I read . . .,” Ella, however, wrote, “Nothing,” and Cora said she does not read a lot outside of her courses.

Connecting Literacies and Experiences

Since it can be challenging to abstractly define a term, the participants had multiple opportunities throughout the study to provide examples of what they considered to be literacies and to attempt to relate their life experience to their understandings of literacy or literacies. A core part of this study focused not only on how the participants seemed to be understanding literacies but also on how they were reporting experiencing literacies. When the participants spoke about their lives and their experiences, more often than not, they related all of their experiences to either reading or writing. The participants demonstrated that they engage with literacies in a diversity of ways, despite perhaps not metacognitively recognizing or expressing in words the many skills they

seemed to be, or that they could have been, using. The collective literacy construct reflects the participants' word-based understandings of literacy; however, the examples and the images that the participants provided to illustrate how they understand and experience literacy, whether presented using words or other modes, reflect additional potential dimensions of their understandings. It is possible the participants had not yet, in some cases, transformed their more concrete thinking into abstract thinking about what literacy entails. In the sections that follow, I present the findings of (a) how the participants used photography to capture literacies, (b) how they commented on their community experiences, and (c) how they commented on their school experiences.

Literacies Captured: Working With Photographs. For the photography activity, the participants were invited to capture their experiences with literacies. Anne was the only participant who did not participate in the photography activity. For the other nine participating individuals, a total of one hundred and twenty-six photographs were contributed to the study: Cadi (sixteen), Bert (fifty), Oliver (seven), Donna (three), Finn (five), Porsche (eleven), Ella (twenty-three), Cora (five), and Sabrin (six). There were some similarities in what was being photographed. This was likely in part because some of the participants completed at least a portion of the activity together. I consider the similar photographs to be a sign of agreement and shared understanding. As a way of reading across the set of photographs, I grouped the photographs into collections as follows: (a) Books, Textbooks, Magazines, and Newspapers; (b) Other Texts: (e.g., Plays, Questionnaires, Graffiti Walls); (c) Bulletin Boards and Posters; (d) School Murals; (e) Signs and Directions; (f) Items and Commercial Products; (g) Computers; (h) Television, Movies, and Video Games; and (i) People.

Although I did not have the opportunity to talk to everyone about the photographs they were contributing, when I spoke with some of the participants, in their discussions of the photographs, they were primarily focused on instances of reading and writing and on identifying items with words on them that could be read or that were written. For example, I asked Bert, "What literacies do you see in all of these pictures?," referring to the set of photographs she submitted, and she replied:

Reading and writing. Well. Not necessarily writing. Well someone had to write it. Not me, but [. . .] And reading, because I see all of them every day, and so I have them. Well, not all of them, but the ones that are in the school I see every day, so it's like, reading them over and over again.

When contrasted with the collective literacy construct, the photographs highlighted the participants' focus on reading and writing, and they illustrated what working with others might look like. Some of the photographs, including the collection of photographs that focused on signs and directions, also drew attention to what becoming informed might entail and why both communication and comprehension are important.

The participants took quite a few photographs that included images of books, which was not surprising considering that reading and writing were listed as part of the definition of literacies for almost all of the participants. Many of the participants also drew a book when illustrating or representing literacies at other moments throughout the study. Donna and Finn were the only two participants who did not submit any photographs that reflected the focus of the first collection (i.e., Books, Textbooks, Magazines, and Newspapers). There were many other types of texts that were photographed by the participants that complemented and extended the first collection, including the following photographs contributed by Bert: a description of a Cirque du Soleil Show, a graffitied 'Hi' on a mirror reflecting a cellphone, a comic strip, a wall decal phrase, an improvisation prompt card, the cover page of a play, a coaster that has a short written text on it of a few lines, and a list of character development prompts for story writing. Porsche contributed a photograph of questions from the sample OSSLT Student Questionnaire and a photograph of the uOttawa logo found on the assent form for this study. Ella contributed a photograph of the "Literacies" graffiti wall, and Sabrin contributed a photograph of the "OSSLT" graffiti wall. Ella and Cora both contributed photographs of a table covered with open homework books. Although the first collection of photographs seemed quite homogenous, this second collection of assorted texts provided a considerable amount of diversity in what was being captured. Bert, in particular, recognized that there were many different objects that have words on them in some form.

The participants also captured many bulletin boards and posters that were found around the school site and the youth program sites, including Bert's photographs of posters for yearbook sales and a poster about distracted driving, Donna's photograph of a chart paper with a list of rules about computer use at the youth program site, and Porsche's photograph of a pink t-shirt that says that the youth program site is a "bully-free zone." The bulletin boards at the school site, as reflected in one of Cadi's photographs, included information about applying to apprenticeships, colleges, and universities, a sign about mental health, and a poster about reading strategies. A set of bulletin boards photographed by Bert show the headings "Courage" and

“Change” with a poster that read “Gay is not a synonym for stupid.” There was also a poster with the date, the time, and the location of an upcoming blood donor clinic. One of the bulletin boards at the youth program site that was photographed by Finn was labelled “Parent Information,” and it included information about activities in the city and helpful services, including information about free monthly dental screenings, access to free books for children, information about Habitat for Humanity projects, Little League registration, a homework club for mathematics and science (Grades 9-12), English conversation groups, and nature camps. There were also images on the board, including one with four hands each connecting a puzzle piece together to form a circle. A set of posters that was photographed by both Finn and Ella at different youth program sites had information about a summer camp and a leadership program. Explaining why she took the photographs she did, Donna said:

Ah, cause they look nice [. . .] No, they . . . I don’t know. In English class, you like, I learned about advertisements and stuff. I don’t know. Why not? I learned about billboards and stuff. That’s why.

Explaining why he took the photographs of the bulletin boards at the youth program site, and the “volunteer information sign,” Finn said, “Because it’s good to know [for] the interviews, like what’s happening around us, around the thing. It helps you read and write words.”

The remaining collections of photographs included many photographs of signs and directions, including emergency exit signs, the fire alarm, a defibrillator, a poster with directions about anaphylaxis, and signs for rooms in the school. Cadi explained, “there’s a picture of me pointing at the exit sign. Because there is literacy everywhere.” Bert also took photographs of a stop sign and street signs. The participants also submitted photographs of items, labels, and commercial products or machines, such as a vending machine, a sign for a chinchilla whose name and price were listed on a store’s window, a pop/soda can, an apple juice bottle, a lip balm, and the information label on the side of the cleaning wipes container. Oliver contributed a photograph of his backpack focused on the brand name in particular. Photographs of computers or people working on computers were also a common reoccurrence. Cadi and Bert took photographs of the netbooks they were working on in their biology class, and Porsche and Ella both submitted photographs of laptops and computers. The participants also submitted photographs related to television, movies, and video games, and there were many photographs submitted that had people in them.

The participants' photographs provide evidence of how they experience and engage with literacies in, and across, multiple disciplinary contexts. A science textbook was photographed and netbooks were being used in a biology class for working with DNA models. There were also images of art (e.g., murals, drama awards, knitting instructions, a card for improvisation), food (e.g., an apple juice bottle and a pop/soda can), as well as commercial products (e.g., a vending machine, the chinchilla at the pet store), all of which require diverse literacy skills and that make possible diverse forms of literacy engagement. The interdisciplinarity of literacies is not something that was clearly noted by the participants though.

Participants in the Community. Throughout the research activities, the participants shared examples of their community involvement and they noted the extracurricular activities in which they participated. The participants did not always make explicit connections between the examples they were sharing and specific aspects of their understandings of literacies though. Even without these metacognitive reflections, the participants' examples of their experiences illustrated the multiplicity of ways in which these individuals engaged with literacies in diverse contexts. For example, Cadi participated in the online community on GoodReads where she shared reading lists and book reviews, Oliver worked at a local grocery store, and Porsche helped with the Ontario Cancer Society. Although all of these examples highlight out-of-school community involvement, the participants also participated in their school communities through extracurricular activities, which also reflect how these individuals were potentially engaging with literacies in different ways through various contexts, even if they were not making these connections explicit. For instance, Bert and Cadi were members of the vocal group at their school, Oliver was a member of the audio-visual team, and Sabrin was a Peer Helper at her school, tutoring Grade 9 students. In the sections that follow, I discuss how Ella, Bert, and Anne spoke about their experiences with community involvement in ways that reflected their understandings of literacies.

Ella in the city. Ella was one of the few participants that spoke quite a bit about how her community involvement was helping her learn to speak English. As a recent newcomer to Canada, Ella demonstrated that she was motivated to quickly improve her skills, and she took the initiative to create many learning opportunities for herself. Ella said, laughing a bit, that she thinks she first “learned how to speak English fluently by memorizing rap music.” This was before she came to Canada. She explained, “I was interested in that, and that’s sort of how I

learned how to speak.” As a newcomer to Canada, Ella shared some of her unique approaches to developing language-related skills. Ella explained that, in order to learn and improve her English, she went to music festivals, she volunteered to help with a university-based program helping Japanese students learn about Canadian culture, she helped at another youth program in the city by working at the registration desk, and she also helped at the youth program site helping the younger children with their homework. Ella explained that throughout the summer after Grade 10, she accumulated a lot of volunteer hours. Ella stated, “I did like three hundred volunteer hours. That’s how I learned how to speak.” On helping with the university-based program, Ella explained, “We were helping this group of Japanese students. They came from Japan. They wanted to learn [inaudible] Canadian culture, but it was actually me who was getting familiar with the culture. I was just volunteering.” Ella seemed to see considerable value in developing her spoken English skills through community engagement. Ella also explained that working with a mentor at the youth program was helping her improve her skills. Ella did not explicitly identify learning a language as part of her conceptualization of what literacy means for her, but Cadi, Bert, Oliver, and Sabrin felt there was a relationship between knowing or learning languages and literacies. Ella’s contributions to the study illustrate what this part of the collective literacies construct could look like.

Bert’s Vacation Bible School. Bert shared some of her understandings about literacies in relation to her experiences with her church community. In particular, she spoke about how she felt people in developing countries do not have comparable access to schools and education as do people in Canada, and, as a result, Bert felt that people in developing countries do not have the same literacy skills. Bert noted that she had just recently attended a youth day on activism and social justice through her school from which she seemed to have taken away a similar message. Talking about her church community in particular though, Bert shared a bit about “a mission trip” she went on for “a week” to another country as part of Vacation Bible School with members of her church community. This opportunity seemed to provide Bert with a unique lens through which she could speak about literacies. Bert reflected on what it meant to share different languages, cultures, and stories. She explained that every week a new group would visit the other country and share a story from the Bible. She said, “it continues the story and everything, so they have it all connecting, because they have people going like every week to do it.” Bert explained that her church group was sent the story they were going to do on their trip, as well as an

accompanying skit that they had to learn. On the trip, they worked with a translator who read the story in the local language of the people they were working with, and Bert's church group performed the skit, they made crafts with the people they were working with, and they also sang songs they were learning in the local language. These were just a few of the different activities from the trip that Bert aligned with her understandings of literacies. Bert seemed to recognize that receiving an education at a school is a privilege that requires financial resources. Bert was not the only participant who saw value in the learning opportunities she had through her church community. Sabrin also commented on her church community, but Sabrin's focus was on her experiences learning English. Sabrin explained that attending masses helped her develop her English skills, which she explicitly related to what it meant to develop literacy skills.

Anne at the youth program. Anne explained that an important part of literacies is being able to communicate a message clearly through different means and mediums. Anne believed that working with children emphasizes how important it is to choose words carefully when speaking, and how important it is to try to ensure that you are being understood when you are speaking. Anne volunteered at the youth program site where she sometimes did arts and crafts with the younger children. These experiences seemed to have helped Anne learn about the importance of communicating clearly. Anne also shared that she was hoping to get a job as a camp counsellor during the summer, and she felt that being able to communicate effectively would be important for that job. Anne's comments about her community involvement highlighted not only how she experienced engaging with literacies in different forms and through different contexts, but it is through these experiences that she seemed to have developed an understanding and an appreciation for what it means to communicate effectively. Anne noted that when she talks with her friends it is less important that she ensure that she is always speaking clearly and being understood. She said that when working with children "you need to know how to get your message across, but with friends, not as much, because they're like, 'Yeah, whatever. I don't care.'" It is possible that Anne perceived there to be greater consequences of not being understood when she was working with children than when she was having informal conversations with her friends.

Participants' Literacies at School. When conceptualizing literacies, many of the participants seemed to draw upon their experiences with literacy at school, including focusing on reading and writing in particular, which they explained was something they did in all of their courses. In

particular, the participants often referred to their English courses or their English as a Second Language (ESL) courses when talking about literacy. Moving from the more abstract conceptualization of literacy to concrete examples of how they experienced literacies seemed to prompt a shift in the participants' focus though. When asked to give examples of literacy activities they had recently engaged in at school, many of the participants mentioned courses other than English. It seemed as though the term literacy was somehow instinctively related to English courses, but thinking about what it means to engage with literacies in the form of an activity prompted the participants to think about their other courses. It is possible the participants saw their English courses as a space where they were developing literacy skills and they saw their other courses as spaces where they were applying those skills. In the sections that follow, I present (a) how Cadi related a concept of literacy to all of her courses, (b) how Bert critiqued the limitations of her English courses, and (c) how Anne spoke about visual literacy in her art course.

Cadi's experiences with literacies in all of her courses. The first example Cadi provided of a literacy activity that she had been working on at school was of an essay she had recently completed for her English course. When asked about examples from her other courses, Cadi explained:

Um. Well, Sociology, I'll start with like all my classes this semester. Sociology, we're doing an independent study, so we're doing surveys and stuff like that and we have to write, do, like we did our review of literature on the effects, or I did one on the negative effects of divorce on children. So, I had to research that and type it into a review of literature and hand that in. Then in law class, we did an essay, and we handed in like a case study. Oh, we did an essay on like *The Charter of Rights and Freedoms*. Well, at least that's what I did, our evolution of human rights, and then we just did a case study. So, we had to look at cases in Canada, pick one, and write a summary. And then write a bunch of these technical law term things that happened in it. So. And then Biology, there's like biology reports, biology test, um. Yeah. And then my other class, which is English, there's like essays and stuff.

Cadi had no difficulty providing examples of literacy activities in courses other than English when prompted to consider the possibility. In fact, she listed examples from all of her current courses. Cadi talked about an independent study in her sociology course, for which they were using surveys and writing a literature review, an essay and a case study in her law course, and reports and tests that she wrote in her biology course. For English, Cadi said they did "essays and stuff." Cadi's focus seemed to be on reading, researching, and writing up summaries, reports, and essays. Since Cadi provided many different examples, I asked her if she thought she was

using the same literacy skills for each of the assignments she mentioned and in each of her courses, and Cadi replied:

I'm definitely using like the same skills. Like you have to be able to think and make a thesis and an informed opinion and use everything that you've learned before to write a good paper and stuff like that. Well, for Sociology, I didn't know what a review of literature was, so she had to like show us basically. But basically, you use the same literacies, but a lot of it depends on how you source it too though, cause like if you source it differently, then you have to add in different things, but other than that, it's basically the same principles that you've learned all your life that you apply to all of your classes.

Cadi highlighted needing to be able to come up with a thesis, to express an informed opinion, to use prior knowledge, to learn about genres of texts that might be new or unfamiliar to her, to cite sources based on discipline-based conventions, and to be able to apply learning across disciplinary contexts.

Bert's critique of the limitations of her English courses. Bert shared similar insights about how she experienced literacies at school. One of the prompts in the journal asked, "What do literacies look like?" Describing her journal page, Bert said, "School, literacies happen at school, in English—any class really." Although English in particular was Bert's first thought, she quickly realized that she used literacy skills in all of her courses. Talking about having to write essays and also having to write lab reports for her biology course, Bert said, "it's kind of the same. It's all the same." Both Bert and Cadi seemed to see literacy as a universal or a transferable set of skills that they could use in multiple contexts. This concept of the transferability of literacy skills was not something that was explicitly discussed by the participants, but this concept highlights the potential depth and complexity there is to their understandings of literacies.

Bert was one of the few participants that challenged the limitations of what she was learning at school. She was critical of the ways in which she was learning about literacies, and she was critical of how she was being taught to develop her literacy skills through her English courses specifically. Bert felt as though she could learn from reading books on her own, and without "someone telling you how to think or how to interpret something." Bert also noted that she liked to write stories, and that was not something she felt she learned to do at school. She said, "I didn't learn to write stories in English class or anything. I just kind of did it by myself, because I like to read, so then I wrote a book. Well, [I] tried to, [but] failed [Bert laughs]." She also added, "Music, how to write music. You don't learn that in English class."

Anne's visual literacies in art class. Anne's first example of a literacy activity at school was also an essay. Anne shared that essays are definitely what she thinks of first, but she tried to come up with other examples. She explained, "well, I keep thinking about essays, but in art class, we do art critiques, and through pieces of art, through history, what do they represent, why it was made, and that kind of thing, and what they portray. So, I guess that would count, maybe." According to Anne, the "essays would help [her] construct [her] wording and grammar and spelling," and the art critiques, she said, would be more about the "visual, like not necessarily writing." Anne specified that with art critiques the focus is on the "visual piece in front and what it's doing." Anne distinguished between writing and engaging with art as text in ways that seemed to align with her understandings of literacies. For Anne, the goal of literacies seemed to be communicating, expressing, and conveying a message through different mediums of text.

Wedging in Critical Literacies

After giving the participants multiple opportunities to share their thinking about literacies, I asked the participants briefly, but explicitly, if they had heard of critical literacies, and what that term might mean to them. None of the participants replied with confidence that they had heard of the term *critical literacies* before. Quite a few of the participants simply stated that they were not familiar with the term, and they did not know what it meant. For instance, when Oliver indicated that he was not familiar with the term, and I asked him if he would like to "venture a guess as to what critical literacy might be?," he replied, "I actually have no idea. Couldn't even guess." When asked about critical literacies, Cadi wondered, "Would that be like, you have to know how to read, and you have to know how to write. Like that? I have no idea." Cadi's interpretation of the word *critical* seemed to be akin to what the terms necessary, essential, or even imperative suggest. Bert was also unsure what the term *critical literacies* might mean, but she wondered if maybe she had heard the term before. When I asked Bert, "Have you ever heard of the term *critical literacies*?," she replied, "Uh . . . No? I don't think so. Maybe. I felt like I have, but I . . . don't know." The following is Bert's reflection, which was the most detailed out of all of the participants, on what the term might mean:

Like the literacies that are critical. That like, the . . . what the test assess[es] is probably critical literacies, because the literacies you need to be able to survive-ish kind of, go to school, be able to communicate with others well, efficiently, like pass, like excel in school—well not necessarily excel in school, but do good in school, and what you should know. Like, if you don't know like connector words, your sentences are going to be like "The dog was fat.

The dog was hairy,” instead of “The dog was fat and hairy.” Because like, that’s probably a critical literacy, and like comma, punctuation, and conventions and stuff, except spelling, are probably critical literacies, and what you should know, whereas a whole bunch of random words like ‘juxtaposes’ and stuff like that, they’re not a necessity at all. You don’t need to know a large vocabulary, if you know like one word for—not one word for everything, but [be] able to like make sentences flow and all that. It’s good enough.

Similar to Cadi, Bert interpreted ‘critical’ to mean necessary skills. She called them “the literacies you need to be able to survive-ish kind of.” Bert explained that these ‘critical’ skills are probably the skills that are being assessed through the literacy test, and they are the skills that students need to “not necessarily excel at school, but do good in school.” Bert distinguished between the skills that are helpful for achieving in accordance with an established standard, and the skills that are needed to be able to excel beyond that standard. Being able to excel in school seemed to require additional skills, according to Bert’s reflection, and these additional skills are not the ‘critical’ skills. Bert noted that being able to use “connector words,” grammar, and conventions are the skills that are critical. Spelling and having a large vocabulary were considered to be extra skills and not as much of a “necessity.”

None of the participants used the term critical literacies when talking about their understandings and their experiences of literacy. However, many of the participants’ expressions of their understandings of literacy align with the proposed conceptualization of critical literacies that is presented in Chapter 4. The literacy experiences shared by the participants suggested that, even without an awareness of the term *critical literacies*, the participants engaged with and experienced literacies in ways that aligned with the proposed construct. Throughout the project, many of the participants demonstrated moments of questioning, critically analyzing texts, critically responding, and also acting and reflecting. The proposed critical literacies construct relates to any and all forms of engagement though, including when someone speaks, writes, reads, performs, and so on.

I briefly shared with each participant how I understand the term *critical literacies* referring to the cyclical process of deconstruction and reconstruction of texts, which can include questioning, analyzing texts, critically responding to texts, and then acting and reflecting. I also referred to some of the terms that the students might be familiar with, such as making connections, considering multiple perspectives, and I noted that critical literacies is often considered to be associated with social justice. I was curious to see if any of these practices might resonate with the participants, and if they might have grasped or latched onto a particular aspect of the

proposed construct as a way in which they could engage in a conversation about critical literacies. None of the participants questioned, challenged, or refuted the conceptualization of critical literacies I offered when sharing how I understand the term *critical literacies*. They also did not ask for more information, for clarification, or for any sort of justification of the ideas I presented. The participants asked questions and sought clarification at other moments throughout the study though, such as when they might not have understood what they could put up on the graffiti walls, or if they did not understand a question on a handout. So, I had previously witnessed, and continued to later witness, that the participants felt comfortable asking me questions. When this new way of thinking about literacies was introduced, the participants also did not attempt to revise their definitions of literacies in light of the new information being presented. Some of the participants demonstrated that they were attempting to make sense of the ideas being shared though. Cadi, Bert, Oliver, and Sabrin, for instance, were trying to determine how the conceptualization of literacies being proposed might relate to their literacy education and experiences. These participants were able to incorporate some of the ideas being introduced into their responses to explain how some of the ideas I was proposing might relate to their own experiences with literacies. Oliver associated critical literacies with “critical thinking,” which was not a term I used, but it is one that is often associated with part of the critical literacies construct. He mentioned that they were learning critical thinking in his English course, and he referred to a writing activity he had recently completed to illustrate how he engaged with literacies in ways that related to what I was proposing. The activity Oliver described focused on practicing how to write a response to a hypothetical letter of complaint from a client or customer in a work context. Oliver explained how the activity could be connected to the proposed concept of critical literacies because students were “responding critically to the person that had the complaint. Or thinking about their side of the argument, and all of that. Understanding the problem.”

Cadi responded by saying, “everything you just said, like that’s definitely what I think a person should have to be an informed member of society. And that’s exactly what a person should be able to do, and I think I can do that.” Cadi also noted, “I think those are the skills they are trying to teach you at school,” but she added, “There’s a lot of people that just don’t get it” though. Cadi believed that “they’re definitely trying to teach you to be critical.” However, she felt that some teachers present “one-sided information,” so, she explained, “you do have to kind

of learn on your own,” and form “your own opinions on stuff” and work “to be able to see other sides of the argument, even if they are not presented to you.” Although Cadi strived to be critically literate, and she felt she was learning and developing those skills at school, in some cases, she had to work hard to continue applying her skills when not all learning experiences provided to her invited students to consider multiple perspectives, for instance. Cadi was critical of essay writing assignments in particular, and the types of texts that students have the opportunity to read for their courses. She felt that some of her teachers’ preferences heavily influenced what she was able to do in class. Cadi seemed to be keenly aware of how to observe and identify bias in others. She also recognized that multiple perspectives always exist, and there are also often multiple ways to do or say something.

Sabrin explained that critical literacies align with what she was learning at school in at least a few of her courses, and she highlighted her experiences making connections between the texts she reads at school and the world. Sabrin thought this approach to teaching was “helping getting students involved.” Both Sabrin and Bert mentioned that when they were reading texts for their English courses, they were encouraged to consider the historical contexts of the texts and to make connections between the past and the present.

Perceived Literacy Influences

Asking the participants to reflect on their understandings and their experiences of literacies was the focus of this study. Although the participants may not clearly, consistently, or confidently articulate a developed understanding of literacy, when asked about their literacy influences, the participants seemed to be much more sure of their responses. Talking about potential literacy influences did not appear to be something the participants had previously reflected on very much though. Ontario students are expected to be developing and practicing using metacognitive, reflexive, and reflective skills based on the Ontario curriculum. Reflection is also positioned as one of the core components of the proposed critical literacies construct.

The words in a bag research activity was one opportunity to learn more about what the participants perceived to be influencing their understandings and their experiences of literacies. During this activity, I asked each of the participants a version of the following: “From who, what, and where do you think you have learned the most versus the least about literacies? Rank the following in terms of the influence and/or the impact they have on your understandings and

experiences of literacy.” I also provided the participants with strips of paper identifying the following potential influences for consideration:

- Friends
- Parents/Family
- Teachers – English Class
- Teachers – Other Subject Areas
- The OSSLT (Literacy Test)
- Community
- Books, Movies, TV, Music, Media, etc.
- Other?

Table 21 lists the order in which the participants each ranked the potential literacy influences. An alternative representation of the tables is presented in Table 22 and Table 23.

Table 21. *Ranking Literacy Influences*

Literacy Influence	Cadi	Bert	Oliver	Donna	Finn	Anne	Porsche	Ella		Cora		Sabrin	
Friends	5	2	3	7	3	5	2	7	4	7	2	2	5
Parents/Family	2	3	2	6	2	4	6	1	8	1	6	1	7
Teachers – English	4	1	4	1	5	1	5	4	5	3	3	N/A	1
Teachers – Other	1	1	5	4	6	2	3	5	7	6	4	N/A	3
The OSSLT	7	4	6	2	8	7	7	8	6	4	7	N/A	2
Community	6	3	1	5	4	6	4	3	3	2	1	N/A	6
Books, Movies, TV, Music, Media, etc.	3	2	1	3	1	3	1	2	1	5	5	3	4
Other?	N/A	N/A	N/A	N/A	7	N/A	8	6	2	8	8	N/A	8

Note. ‘1’ = Most influential; ‘8’ = Least influential, ‘2’ to ‘7’ = The range between the most and the least influential; ‘N/A’ = Potential influence that was excluded by the participant. Some of the participants grouped particular items and placed them side by side on the table. The items that were placed side by side are marked with the same numbers, and they are ranked at the same level in terms of influence. Porsche, Ella, and Cora first ranked the items with English as their frame of reference, but then, when prompted based on their comments, they re-ranked the items based on their first or another language they speak to identify how their literacy experiences change when they focus on a different linguistic context. For these three participants, there are two columns with ordered items. The left column goes with English, and the right column goes with a language other than English.

Finn and Cora did not indicate what they wanted the “Other” option to signify, and Sabrin said, “I don’t think I have an ‘Other.’” When Ella first ranked “Other?” as the second most influential, she indicated that this would be her mentor at the youth program, and Porsche said:

I guess “Other?” could be yourself, and how like outgoing you are, because there are some people that don’t communicate; they’re really shy versus the people that aren’t shy, they’re not afraid to be wrong, so I guess that could be.

Porsche seemed to suggest that an individual can, in part, influence their development of English language skills based on how they choose to engage with others.

Table 22. *An Alternative Representation of the Participants' Initial Rankings of Literacy Influences*

Rank	Cadi	Bert	Oliver	Donna	Finn	Anne	Porsche	Ella	Cora	Sabrin
1	Teachers (O)	Teachers (E)	Community	Teachers (E)	Media	Teachers (E)	Media	Media	Community	Teachers (E)
2	Family	Teachers (O)	Media	OSSLT	Family	Teachers (O)	Friends	Other?	Friends	OSSLT
3	Media	Friends	Family	Media	Friends	Media	Teachers (O)	Community	Teachers (E)	Teachers (O)
4	Teachers (E)	Media	Friends	Teachers (O)	Community	Family	Community	Friends	Teachers (O)	Media
5	Friends	Family	Teachers (E)	Community	Teachers (E)	Friends	Teachers (E)	Teachers (E)	Media	Friends
6	Community	Community	Teachers (O)	Family	Teachers (O)	Community	Family	OSSLT	Family	Community
7	OSSLT	OSSLT	OSSLT	Friends	Other?	OSSLT	OSSLT	Teachers (O)	OSSLT	Family
8					OSSLT		Other?	Family	Other?	Other?

Note. 'Teachers (E)' = Teachers – English Class; 'Teachers (O)' = Teachers – Other Subject Areas; 'Family' = Parents/Family.

Table 23. *An Alternative Representation of the Participants' Re-Rankings of Literacy Influences (When a Language Other Than English Was Considered)*

Rank	Porsche	Ella	Cora
1	Family	Family	Family
2	Media	Community	Friends
3	Community	Teachers (E)	Media
4	Teachers (E)	OSSLT	
5	Teachers (O)	Media	
6	Other?	Teachers (O)	
7	Friends	Friends	
8	OSSLT	Other?	

Note. 'Teachers (E)' = Teachers – English Class; 'Teachers (O)' = Teachers – Other Subject Areas; 'Family' = Parents/Family.

A re-ranking of literacy influences is not presented for Sabrin; however, when asked whether she would think about the list of potential influences differently if she focused on a language other than English, Sabrin noted just that she would place her family first. Sabrin explained that her family knows how to read in one of the other languages that Sabrin speaks, so they would be able to help her. Porsche, Ella, and Cora also all positioned “Parents/Family” at the top of their lists as being the most influential source for their literacy understandings and experiences when they considered a language other than English. Sabrin did not offer any other re-rankings, and she did not seem too sure about how to approach this activity when thinking about a language other than English. This likely aligns with her articulated understanding that literacy is associated with learning the English language.

When explaining her rankings, Cora explained that she speaks Farsi at home with her parents, so she finds that helps her develop her skills in that language. Cora also mentioned that her parents “are encouraging [her] to watch English movies, not Farsi, because [she] know[s] [she is]

fluent in that.” Thus, she ranked movies a bit lower in her re-ranking than she would have if she were not currently working on learning English. Porsche explained that friends were initially ranked highly when she was thinking about her rankings in terms of the English language. She said, “I had to learn English myself, so like I learned that from friends. That helped a lot.” When thinking about Farsi, Porsche suggested though that friends do not help. Instead, she said, “No, friends, actually, I think, take it away.” Ella agreed with this statement. Porsche explained that when speaking with friends, she uses slang, and she and her friends “don’t talk proper anymore.” Ella added that when talking with friends, they also “make a lot of inside jokes and . . . get parents upset.” These comments are similar to comments made by some of the other participants in that there seems to be a proper form or an ideal language that the participants seemed to feel they were expected to learn, know, and use. Anne noted that when speaking with friends, she does not feel she has to work as hard to make sure they understand everything she says. Sabrin seemed to think that having a literacy test was helping to ensure that youth were developing those proper language skills, and that without the test, everyone would just end up using “slang” language, which she perceived to be a threat to being able to understand one another.

The ways in which Porsche, Ella, Cora, Anne, and Sabrin each spoke about literacies in the context of different languages shows how complex literacies can be. Knowing and learning multiple languages is a unique and powerful literacy experience. Porsche shared insights into what her literacy experiences might sometimes look like as she ‘switches’ between languages. She explained that although she realized that each language has an alphabet, a directional way of reading text, and sentence structures, and she said that all of these ways of engaging with language are literacy for her, she added that when she is considering what she knows in Farsi:

you can’t, like I can’t connect it to English. Like I have to switch it up all the time. It’s not that difficult, cause I can do it, but like if you are looking at it from outside, it’s very difficult.

Porsche and Ella both suggested that Farsi and English are very different, and they both agreed that it’s like working with “two different worlds.” Anne shared similar comments when reflecting on her experiences of thinking in Chinese and then trying to express herself in English. Anne explained, “I often have this, where I’m thinking in Chinese and, um, it’s a way to express it but I can’t really relate it to English because there’s no word or there’s no expression for that, the way I’m thinking right now.” Palmer (2009) notes, “Code-switching, or moving easily between one linguistic code and another within a conversation or an utterance, is a natural part of

being bilingual (Hornberger, 2005; Reyes, 2001; Zentella, 1997)” (p. 42). The participants seemed to find this translation process, which is referred to as code-switching (see Barnes, 2011; Devereaux & Wheeler, 2012; Palmer, 2009; Yi, 2010), to be challenging at times though. Being able to make connections between two or more different language systems, and understanding how and why conventions are accepted and used in particular ways and for what intended purposes, could potentially enhance these students’ understandings and their use of particular literacy skills in powerful ways.

A concept of code-switching (see Barnes, 2011; Devereaux & Wheeler, 2012; Palmer, 2009; Yi, 2010) can also apply to how students engage with literacies in ways that extends beyond just working with multiple languages. Code-switching is relevant when transferring knowledge between literacy contexts (e.g., drawing on previous learning experiences when completing a standardized test, when working on a group project, when engaging in a class discussion, when working after school, when playing a sport), when working with multiple modes (e.g., speech, ink, paint, clay, movement), and when navigating multiple discourse communities (e.g., the communication expectations and norms that are respective of family, friends, work, community). It can be a productive exercise to practice recognizing “possible overlaps” (Yi, 2010, p. 28), for instance, between in-school and out-of-school literacy practices. The participants’ discussions of their potential literacy influences demonstrated that they seemed to still be developing their conceptualizations of what literacy might entail and how literacy might look and be experienced differently in different contexts.

The participants’ rankings, thus, tended to correspond with their articulated understandings of literacies, as well as with how they reported experiencing literacies in more concrete terms. Ranking a concept of community seemed to be particularly challenging for some of the participants. Each participant seemed to be involved in many different communities, and they could have potentially drawn on any number of the experiences they had previously shared throughout the project. The words in the bag activity was completed later than most of the other activities. Anne, for instance, was not really sure how community could influence someone’s understandings and experiences of literacies. She said “And community, I don’t really know. Community, they have . . . I don’t understand how community would affect you that much.” That the participants did not take this opportunity to talk about their community involvement

suggests perhaps that the participants did not always readily make connections between these everyday experiences and what literacies might entail.

Finn, Oliver, Donna, and Anne suggested that the availability, access, and exposure they had to particular potential influences was considered when determining which sources might have influenced their understandings and experiences of literacies. When talking about the first few items in his list of ranked influences, Finn said, “Cause I do this every day, and this comes after, and then I’m with my friends and community.” Finn ranked “Books, Movies, TV, Music, Media, etc.” first, followed by “Parents/Family,” and then “Friends” and “Community.” Oliver similarly noted that the people and things that he is surrounded with most tend to have the most significant impact on his literacies understandings and experiences. Donna also used a similar line of reasoning to explain specifically why she listed her English teachers, which she noted “teach you the literacy,” and the OSSLT, “because that’s kind of where you test your literacy skills,” followed then by books and media. Donna seemed to focus on whatever she experienced most often and also what she felt most explicitly dealt with literacies. Donna ranked her English teachers and the OSSLT the highest, meaning they have the greatest influence on her understandings and experiences of literacies. Explaining her ranking of books, Donna said, “And then books and movies and stuff, because you watch them every day.” She clarified to note though that not everyone does. When talking about her experiences with literacies during other research activities, Donna also focused primarily on her English courses, and she did not offer many examples to clarify her understandings or to extend how she experiences literacies that drew upon her experiences outside of the English classroom context. Explaining her rankings, Anne also noted that English courses are significant:

English is enforced on you and you have to take it every single school year. Other subjects, you do have to write essays and reports for other subjects, so that will help as well. Books, movies, that kind of things, do help your literacy a bit. I don’t think people pay as much attention to the writing style as they do in school though.

Anne suggested that there is a heightened awareness of literacy in a school environment that might not be paralleled when someone reads a book or watches a movie, for instance, on their own.

Cadi and Bert both commented on the influence of their English teachers in similar ways. Although Cadi ranked teachers of other subject areas first, and her English teachers fourth, Bert ranked all teachers in first place as having the greatest influence. Bert highlighted English

teachers a bit more though explaining that her English courses are “literally about literacies.” She said she would then position “teachers in other subjects because you also have to write essays for them, because everyone likes essays apparently.” Bert was critical of the type of influence her English teachers were having on her experiences though. Bert said, “I don’t think it is necessarily positive.” According to Bert, “it depends on your teacher.” Bert and Cadi were both critical of the texts they had to read and the lack of choice they had. They also felt like they received better marks for their work when they wrote on topics or when they shared opinions that they thought aligned with their teachers’ interests. Bert raised the possibility that some of the literacy influences might be having, what she perceived to be, a positive influence on her understandings and her experiences, while others were sometimes having, what she perceived to be, a negative influence.

Oliver and Cadi noted that their literacy influences have been changing over the years. Oliver, for instance, explained his rankings for media, family, and friends in particular as follows:

Well, books, movies, TV, video games, music, that’s . . . that’s one of the first things you listen to and see when you’re a kid, and that . . . Movies, books, and TV were, were my childhood until like age six. And, parents and family, well, you’re always listening to them talk. So, you kind of pick up how they speak . . . through when they speak, and how they say it. Ummm. Friends. Any time after age six was friends, books, movies, and TV. So, umm, they’re there more than the teachers are, and, after a certain age, they’re more there than your parents are. Right now, my friends have been affecting how I see it more than my parents.

Cadi similarly stated, “I’m going to go with teachers first, just because school has taught me a lot, so when it comes to reading, like my first grade teacher, she taught me how to read.” Cadi noted that she did read with her parents when she was a child, but, she said, “I remember going into Grade 1 being like, ‘I can’t read,’ and then I was like top of my class in the year.” In terms of how her parents have influenced her understandings and experiences, Cadi said, “My parents, they’ve mostly taught me ideas, like about the world and stuff like that, and political views [. . . .] They’ve really informed my opinions about the world. Kind of bias in some instances.” Cadi added that her parents have “taught [her] to form [her] own opinions, and to be sort of biased” when she is presented with information.

During this activity, many of the participants did not indicate that they felt the literacy test was a significant influence in terms of their understandings and experiences of literacies. Cadi, Bert, Oliver, Finn, and Anne all placed the OSSLT in last position marking it as having the least influence on their understandings and their experiences of literacies. The participants’

explanations of their rankings indicated that the literacy test was being dismissed because the participants did not perceive it to be a significant learning experience. Oliver summarized his rankings by stating, “And the OSSLT doesn’t teach me anything, it just shows what you’ve learned through these people, and events, so.” Bert said that “it’s literally the same as English class. You’re not really learning anything new, and . . . so, it’s not going to advance it [referring to her literacy skills] or anything, and I don’t like it.” Porsche claimed that even the test preparation that was done through her school did not help her improve her skills. These observations align with the literacy test’s objective to assess current abilities rather than trying to necessarily construct a new literacy learning experience for students. When presenting this research activity to Anne, she immediately selected the OSSLT, and said, “Probably lowest. It didn’t have that much of an impact. It’s just more of an assessment.” Although Cadi initially explained, “[The] Literacy Test didn’t really teach me anything I didn’t already know,” upon further reflection, Cadi conceded that she did learn something from her test results though:

It helped me understand . . . that according to the government, I’m good at English. I don’t know. It really just . . . I guess it sort of helped me understand what people are looking for in literacy, like what they want you to say, and what they want you to get from what you are reading-ish.

For Cadi, the literacy test seemed to have an influence on how she was prioritizing particular literacy skills, and how she was structuring the texts she was writing. When reflecting on how the OSSLT might be influencing her, Bert said that it was “negatively” influencing her understandings and her experiences with literacies. Even though Bert positioned the OSSLT in the least influential position in comparison to the other options provided, because she did not feel she was learning anything new through the OSSLT, she did note that the experience was having an influence on how she felt about literacies. Bert was the only participant that stated during this activity in particular that she perceived the OSSLT to be having a negative influence on her understandings and her experiences of literacies. Bert explained her perceptions as follow:

Cause well, cause you don’t want to do it, and you are being forced to do it, and then it’s like, “Oh, I am being forced to write a newspaper article.” Why would I want to do that. I hate newspaper articles now. Or et cetera. Essays. It’s just irritating because they test on things that you do in class that you get marked on already, and . . . I don’t know. It’s just . . . pointless to me. I think I’ve already said that multiple times.

Some of the participants positioned the literacy test considerably higher on their lists. These participants perceived the test to be something that more explicitly and directly deals with literacies, as noted by Donna, or as an important part of their experience learning the English language, which was the case for Sabrin. Sabrin explained some of her rankings as follows:

My English teachers are the one who helped me know English, and the literacy test helped me understand the importance of reading and writing and why you have to keep on practicing your English. And teachers of other subjects, like English is in everything. Like here in Canada, you have to use it in science and math and everything.

Sabrin participated in an after-school test preparation program through her school, which she found to be quite helpful in helping her prepare for the test by helping her improve the particular skills that were being evaluated through the literacy test.

Valuing Literacy Skills

All of the participants felt that developing their skills was important, and they gave many reasons for why they felt it was important to have literacy skills, which included being able to communicate, being an informed and contributing member of society, and being able to use the skills that are needed for daily life. Quite a few of the participants highlighted the importance of being able to communicate. On the graffiti walls handout, Porsche, for instance, wrote that “[b]eing able to communicate is very important,” and Donna noted that the purpose of developing literacy skill is “to be able to read and write or even to be able to communicate orally.” Anne stated that the purpose of developing literacy skills is “to better express ideas and yourself,” and she wrote that literacy skills are “quite important,” followed by a drawing where four out of five stars were shaded in.

Cadi’s focus throughout the project was fairly unique compared to the other participants in that she focused quite a bit on the purpose and importance of being an informed and contributing member of society in particular. For Cadi, literacy skills are, as she wrote on the graffiti walls handout, “extremely important” to her because “literacy evolves society.” Cadi explained that it is important to be able to understand what you read, so that you can “make an informed decision about it.” She said, “if you’re reading something, and you don’t understand what you’re reading, then there is really no purpose to it.” If you understand what you read though, and you are able to make an informed decision, according to Cadi, “you’ll be an active citizen, and you’ll be able to contribute to the world in a positive way.” Cadi seemed to believe that literacies are related to

social awareness and social development. She noted that it is important to “be informed about what’s going on around you.” She also explained that “it’s really important to be able to write and speak and get your opinion across, and be able to be understood.” For Cadi, it is important to be able to “articulate what you want to say,” to be able to “prove what you are saying,” to be able to form an opinion, and to have it be “well written and grammatically accurate,” which happens when there are “no spelling mistakes” and when “you are organized in your thought.”

Oliver, Bert, Cadi, and Donna all emphasized that they value the skills they need or that they might need for ‘daily life’ or in ‘real life.’ When talking about whether or not he values literacy skills, Oliver emphasized that he values the particular skills that he feels he needs in life. He wants to be able to look at a sheet of paper and be able to read it, but he said, “That’s as far as I’m willing to take my reading.” Oliver expanded his response by stating, “if you put something like a huge chemical formula from science or anything, I’ll look at it, and go, ‘I’m done. I’ll go away now.’ Cause there’s just, I don’t need to learn it [. . .] I’m never going to be a scientist.” Bert also explained that which literacy skills you value most might depend on the kind of work that you do. She noted that for some jobs in particular, strong oral communication skills are especially important. Oliver also commented on the importance of literacy skills in terms of social awareness as part of daily life, but he highlighted personal safety in particular. Explaining the value of literacy, Oliver stated:

[I]t’s kind of a necessary evil, cause in today’s, like reading and writing, they’re both necessary evils, cause without reading and writing, you walk down the street and there could be a ‘Warning Nuclear Radiation,’ you’re going to walk right on past it and not have a clue what it just said. So, it’s more or less a necessary evil for safety and awareness, and it ties in with like bus stop signs, or stop signs, or billboards, or magazines, or anything like that.

Cadi noted that, for her, valuing literacy skills meant valuing more than just the skills that she will need to be able to succeed in university. She said, “why are we learning it, except to go to university, and learn it there, and then not use it in real life.” Cadi referred to the life skills she is hoping to be able to learn, including how to pay bills and taxes. Cadi explained how for some of her courses it seemed as though they were simply learning material so that they could pass a test and then move on. Discussing her sociology course, she explained, “we’re doing like a bunch of theories on all these people and stuff like that, and basically, like you write down all these theories, and I memorize them for the test, and then after the exam, I just forget all the stuff.” Cadi noted that it would be helpful if teachers “gave [them] some reasons as to why what [they]

are learning is important.” Oliver explained though that his teachers seemed to be encouraging students to find meaning in the tasks they were doing for their courses. He said, “Well, one thing I find is teachers are always asking you to look whenever you are doing a project or something, figure out how it’s going to affect you, how it’s going to help you.” Oliver said that when he was completing an assignment, he “just want[s] to know if it’s going to benefit [him], and how it’s going to benefit [him], and the best way that it can.” He said he can “sometimes” find those links about how different projects or assignments might help him in the future.

Donna’s comments suggested that being able to read, write, and speak are valuable skills possibly because of the frequency with which we have become dependent on using these skills. She said these skills “are really important” because, she added, “we use these skills on a daily basis.” In her oral response, Donna did not convey any indication that she consciously and actively uses literacy skills in her daily life though. Instead, it seemed as though Donna simply ‘forgets’ about literacies when she leaves the classroom context rather than continuing to metacognitively reflect upon her skills and her use of those skills. The potential to reflexively and reflectively consider one’s engagements did not seem to be part of Donna’s ‘daily’ or everyday lived experiences.

At times, there were some inconsistencies in what Donna reported though, and it seemed as though the mode through which Donna was representing her thoughts influenced what she shared and how she structured her responses. In particular, there were differences with regards to how Donna commented on the value of literacy skills in her written contributions versus through oral conversations during the study. On the graffiti walls handout, which Donna completed during the first research session, there was a question asking the participants about the purpose of developing literacy skills. This was followed by a question asking how important literacy skills are to them. In response to these questions, Donna wrote, “The purpose of these skills is to be able to read and write or even to be able to communicate orally. These skills are really important to me because we use these skills on a daily basis” (see Figure 51). When talking with Donna during the second research session, which was one week later, I asked Donna if she values the development of her literacy skills, she said, “No.” So, I followed up asking, “No? Why not?,” and she said, “I don’t know. That’s a good – I don’t know. I just, I learn them in English class, and then I just forget about them. And I just . . . I don’t think about them.” A little while later in the conversation, I returned to this idea of valuing skills, and asked Donna if she thought having

“a basic ability to read and write [was] important for youth today.” She replied, “Yeah.” Donna said that it was important to be able to read and write, and she suggested that youth need these skills “[t]o understand stuff.” She noted her uncertainty though, by adding, “I don’t know.”

c) What do you believe is the purpose of developing literacy skills? How important are these skills to you?

The purpose of these skills is to be able to read and write or even to be able to communicate orally.
These skills are really important to me because we use these skills on a daily basis.

Figure 51. Purpose of Developing Literacy Skills and the Value of Literacy Skills According to Donna (Graffiti Walls Handout)

Donna’s written response seemed like a model response. Donna used the two questions to start her sentences, and there was something about the structure of her response that made the response seem complete. After reading her response, I was left wondering though how Donna’s thinking about numeracy, working with others, and thinking, which are not reflected in this particular response, but they are ways in which Donna conceptualized literacy elsewhere, might also factor into her understanding. In another instance when Donna was responding to the question on the project questionnaire that asked, “What do the terms ‘literacy’ and/or ‘literacies’ mean to you?,” Donna also used part of the question to begin her response when she wrote, “To me literacy means the ability to [r]ead and write” (see Figure 44). This response, which follows a similar response pattern, also does not appear to sufficiently or effectively capture Donna’s thinking about literacies, which seemed to extend beyond reading and writing.

While reading across the cases, it seemed as though the participants were at times trying to determine why they were supposed to be valuing literacies, which is the basis of the literacy graduation requirement and the literacy test. They seemed to be trying to determine what value literacy skills have in relation to their current and future lives.

Despite valuing the development of their literacy skills, the participants did not seem to have much experience talking about their plans for improving their literacy skills, with the exception of the participants who seemed motivated to learn the English language in particular as newcomers to Canada. The participants who were focused on learning English seemed to be more aware of how they were actively working on developing their skills. Porsche, Ella, Cora,

and Sabrin highlighted how they learned a language by watching television, listening to music, attending mass, volunteering in the community, as well as working on completing English as a Second Language (ESL) courses at school. These participants seemed to be focused on learning to read, write, and speak in English at least effectively enough to do well in their courses, to pass the literacy test, and to be ready to pursue postsecondary education in English. For the participants that did not explicitly identify learning English as an explicit part of their literacy experiences, it seemed to be more challenging to identify how they go about improving their skills even though most of the participants seemed to value literacy skills at least for particular forms of engagement. The literacies graphic organizer (see Appendix F) was helpful in developing an understanding of how the participants might work through identifying their strengths, areas needing improvement, goals, and future plans.

The participants seemed to struggle at times to consider how the skills they have and the skills they are hoping to improve might relate to their future goals, including their future educational plans and career aspirations. Part of the challenge is likely trying to imagine a context they are unfamiliar with though. Considering how skills can be transferred between contexts requires in-depth knowledge of both the skills and the different contexts being considered. The participants seemed to still be developing their knowledge and understandings of the skills they are focused on, and they only have limited knowledge of the future they are attempting to imagine for themselves, including what their future jobs might require of them.

Focusing on the more imminent futures that the participants were planning for, since Donna was thinking about seeking summer employment, we talked a bit about what types of work she might be looking for, and whether or not she thought she might need any specific literacy skills for the types of work she was interested in. Donna began by saying, “Probably not,” and then added, “Well, maybe oral communication, but that’s probably it.” Donna explained that she would likely be doing “cashier work and restocking stuff,” if she got a job in retail or at a grocery store. Donna did not indicate that reading or writing might relate to these types of employment. While it is not possible to know in advance what every educational program, job, or even life experience might demand of any given individual, understanding how a literacy ‘toolbox’ or set of skills can benefit an individual and set each individual up to be able to navigate complex and challenging situations in everyday life now and in the future is helpful. Having the skills to be able to continue learning and developing literacy skills is important.

Many of the participants expressed an interest in wanting to know why they were learning what they were learning at school, and they seemed to want to be able to see value in what they were learning. The participants seemed interested in the application and transferability of literacy skills to different contexts; however, they did not always seem to find value in the activities they were required to complete or understand how a particular activity, or the skills they were using for a particular activity, might relate to how they might wish to engage in other contexts. If these skills are important for students, it is important to consider that the participants in this study seemed to still be developing their understandings of what literacy might entail, and they were still figuring out how their literacies might relate to their lives in different ways.

As presented throughout this chapter, the results of this study show that most of the participants conceptualize literacy broadly in terms of both communication and comprehension and, more specifically, in terms of the experiences of both reading and writing. Individually, the participants presented variations on how they are making sense of this complex concept though. The participants drew upon their developing understandings and their diverse experiences to indicate how concepts of language and diverse text types might relate to how they understand literacy. When talking about how they are experiencing literacy, their descriptions and explanations seemed to emphasize how the world can quite literally be read as a text, since there are written texts everywhere that are intended to guide and support individuals in their daily lives. When the participants reflected on what influences their understandings and experiences of literacies, it became clear that the participants recognize that they have a number of possible resources available to them through which they might be learning something about literacies. All of the participants noted that they value literacy skills, and they recognized that literacy skills are essential skills. What was less clear in some cases was how the participants were actively working towards developing their skills and how metacognitive awareness and reflective skills might relate to their learning experiences. For the participants who talked about learning the English language as an additional language, learning a language seemed to be the core focus of what literacy was all about. In the next chapter, I present the results of how the participants specifically commented on the literacy test as one element of their educational context, and, in Chapter 9, I discuss how the results that correspond with each of the sub-questions presented throughout this chapter come together in response to the first central research question.

CHAPTER 8. MULTIPLE CASE AND CROSS-CASE ANALYSES: PERCEIVED INFLUENCE OF THE OSSLT ON LITERACY SKILL DEVELOPMENT

In this chapter, I present the findings of the multiple case study in response to the sub-questions that align with the second research question. The second central research question and the associated sub-questions are as follows: “How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills?”

- How are students experiencing the literacy test?
 - What knowledge do students have of the OSSLT?
 - What do students believe is the purpose of the OSSLT?
 - How do students describe their experiences with test preparation?
 - How do students describe their experiences writing the OSSLT? What are students’ reflections on the testing process, including the test format and content?
 - What do students think the OSSLT is assessing? How do they understand the OSSLT’s evaluation criteria?
 - What are students’ thoughts and feelings about the value of the OSSLT?
 - What comments do students have about the OSSLT?
- What are students’ perceptions of the potential influence of the literacy test?
 - How are students interpreting, sharing, and using their test results?
 - Do students feel that their results are an accurate representation of their literacy skills (now and/or in the future)?
 - What potential influence do students say their OSSLT results have on their self-image, courses/graduation, or future plans and goals?
 - What potential influence do students say their OSSLT results/experiences have on their relationships (understandings and experiences) with literacies?
 - Do students feel the OSSLT (namely preparation for the test) might influence their classroom environments or their learning?
 - What do students say they have learned from the OSSLT?

In order to respond to the second research question about students’ perceptions of the influence of the OSSLT, I first considered how the participants were experiencing the literacy test. What students know about the test and how they experienced the test can be understood to constitute a frame of reference upon which the participants might be basing their assessments of the OSSLT’s potential influence. The findings presented in this chapter are synthesized and discussed in Chapter 9 in response to the second central research question.

Experiencing the Literacy Test

In the sections that follow, I present the ways in which the participants described experiencing the OSSLT. In particular, I present (a) what the participants report knowing about the literacy test and what they understand is the purpose of the test; (b) their experiences preparing for the test; (c) their experiences writing the test, including their reflections on the testing practice. I also present (d) the participants' thoughts and feelings about the value of the literacy test, and, (e) in one case, a participant was also able to reflect on his experiences with the literacy course.

Knowledge of the Literacy Test and Perceived Purpose of the Test. The literacy testing program is part of a high-stakes accountability program that holds students accountable for their literacy education; thus, students should understand how this testing program functions and what is being measured through the testing program. Since the participants in this study were being asked to critically reflect and comment on their experiences with the literacy test, it is helpful to understand what the participants reported knowing about the literacy test. Throughout the research activities, the participants had multiple opportunities to demonstrate their knowledge of the literacy test. Most of the participants offered a basic description that summarized the types of questions that were on the literacy test. Donna, for instance, said that she knows "that you have to write an essay, and a newspaper article, and you have to read passages and answer questions."

The graffiti walls activity was one of the spaces through which the participants were invited to share what they know and think about the OSSLT. When adding contributions to the graffiti walls, most of the participants contributed their thoughts and feelings about the testing practice rather than factual details about the literacy test though. There were only a few subtle or implicit references to aspects of the test's design. Oliver's question and answer text, his contribution of a newspaper excerpt, and Donna's contribution of the word "Essay" on one of the graffiti walls were the few contributions that seemed to directly relate to the content of the test. Some of the contributions were critical of the types of questions on the literacy test and what students were being asked to do. For instance, for the answer in his question and answer text, Oliver added, "NO!" Figure 52 and Figure 53 present two of the "OSSLT" graffiti walls that were collaboratively constructed. Table 24 and Table 25 present ordered lists of the items that were contributed to the graffiti walls by each participant to help illustrate how these walls came to be. As previously mentioned, the same set of supplies were made available at all of the research sites, and Finn and Anne did not have the opportunity to participate in the graffiti walls activity.

The participants' contributions to the graffiti walls focused on how they felt about the test's level of difficulty, how their skills were being assessed, what the testing practice made possible, and how it engaged students. Donna, for instance, contributed the word "Easy" (see Figure 54). Donna emphasized on numerous occasions that she felt the literacy test was "really easy" (see Figure 55). Donna felt it was important to share her view that the test was easy. She explained, "maybe some kids will, if I say it's easy, maybe they'll think it's easy too." On an "OSSLT" graffiti wall, Bert wrote: "Please show that you have a brain," which suggests perhaps that she also found the test questions to be rather simple in what they were asking students to demonstrate. Oliver critiqued how spelling in particular was being assessed on the test. He felt that spelling errors impact a student's test score too much. Oliver created the following acrostic poem using the name of the literacy test that reflects perhaps how representative he feels his test results are: "Obviously. / Soal. / Sucking. / Lies. / To date." When Bert was drawing a skull and crossbones on the graffiti wall, Cadi asked, "What are you drawing . . . death, ha ha. That's how most people feel towards literacy, well the test at least." Bert also wrote that the test was a "waste of life," and it was "too much pressure." Porsche commented on the test being "long" and "boring." Cadi wrote that students "Need more time to write!"

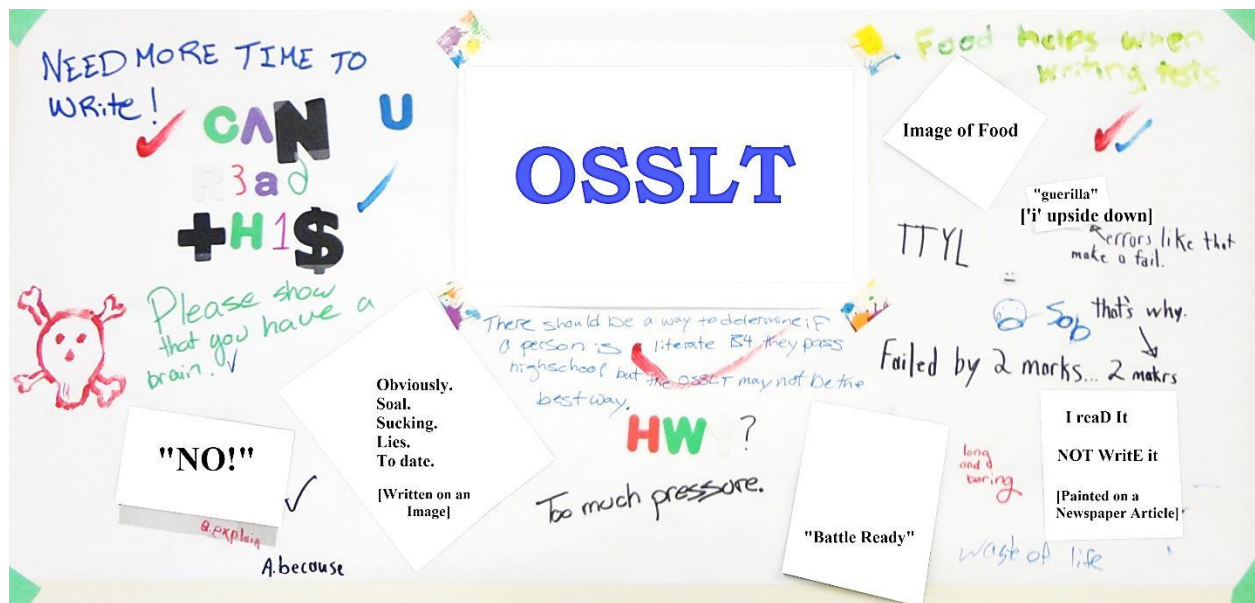


Figure 52. "OSSLT" Graffiti Wall – Contributions by Cadi, Bert, and Oliver

Note. Source of "guerilla": Guerilla Group & CHUO FM 89.1, 2013; Source of "NO!": McCormick & Trejo, 2013; Source of "Battle Ready": Tardioli, 2012, p. 27.



Figure 53. “OSSLT” Graffiti Wall – Contributions by Porsche, Ella, and Cora

Table 24. *Alternative Mapping of the “OSSLT” Graffiti Wall Contributions by Cadi, Bert, and Oliver*

Order	Item	Contributor	Order	Item	Contributor
1	Newspaper with ‘NOT’ Writing	Oliver	12	“No!” ^b with Q and A Text	Oliver
2	Red Skull	Bert	13	“Too much pressure”	Bert
3	HWY?	Oliver	14	‘guerilla’ ^c ; “Errors like that”	Oliver
4	“That’s why” → “Failed by”	Oliver	15	“Long and boring”	Bert
5	‘Need more time’	Cadi	16	Blue Check Marks	Cadi
6	Pants Picture with Poem	Oliver	17	“TTYL”	Oliver
7	“Food helps”	Cadi	18	“Please show that you”	Bert
8	Picture of Food	Bert	19	“There should be a way”	Cadi
9	Can you read this?	Oliver	20	Small Circle Neutral Face	Oliver
10	Red Check Marks (x3)	Bert	21	Blue Sad Face; “Sob”	Bert
11	“Battle Ready” ^a	Bert	22	“Waste of life”	Bert

Notes. ^aTardioli, 2012, p. 27; ^bMcCormick & Trejo, 2013; ^cGuerilla Group & CHUO FM 89.1, 2013.

Table 25. *Alternative Mapping of the “OSSLT” Graffiti Wall Contributions by Porsche, Ella, and Cora*

Order	Item	Contributor	Order	Item	Contributor
1	Awful	Cora	9	Re-underlining ‘Pointless’ Again/Over	Cora
2	Red ‘X’	Ella	10	Underlining ‘Full’	Cora
3	Boring	Porsche	11	Long	Porsche
4	Eww	Cora	12	Lines Under Word ‘Long’	Cora
5	Yes, Line Going to Boring	Cora	13	Hate	Cora
6	Pointless	Porsche	14	Fingerpainted Dots	Cora
7	Underlining Near ‘Pointless’	Ella	15	‘If they decrease the time’	Ella
8	Full	Ella	16	‘The results depend’	Ella



Figure 54. Donna's Contributions to the "OSSLT" Graffiti Wall

Question 4. Describe your experience(s) taking the Literacy Test (OSSLT).

My experience with the literacy test was good. I found it was really easy. It was everything that I had previously learned in english class. My teachers did a really good job of getting me prepared.

Figure 55. Donna's Experience Taking the Literacy Test (Project Questionnaire)

Throughout the research activities, a few of the participants expressed that they saw some value in the literacy testing practice though. On an "OSSLT" graffiti wall, Sabrin commented on how people use slang, and she presented, what seemed to be, a critique of the deterioration of language usage due to the popularization of text messaging and increasingly informal conversations. Sabrin posted a few lines of slang expressions and phrases she found online that included acronyms, abbreviated words, and the liberal usage of conventions, including a lack of capitalization, extraneous punctuation, and the use of numbers instead of letters. Talking about the slang phrases, Sabrin said, "this is how we text each other, so imagine the future generations. Like if you don't have literacy tests, everybody would talk this way, so nobody would really understand." Sabrin commented on the importance of having "literacy tests and practicing english" (see Figure 56). She also contributed a modification of an expression circulating in popular culture when she wrote, "Keep calm and pass the Literacy test" (see Figure 57). This expression, and the different ways in which it is being revived in popular culture, seem to indicate that when undergoing something challenging, it is best to just persevere. Cadi also saw value in having a literacy test, but she was critical of the testing practice. On the "OSSLT"

graffiti wall, Cadi wrote, “There should be a way to determine if a person is literate B4 they pass high school but the OSSLT may not be the best way.”

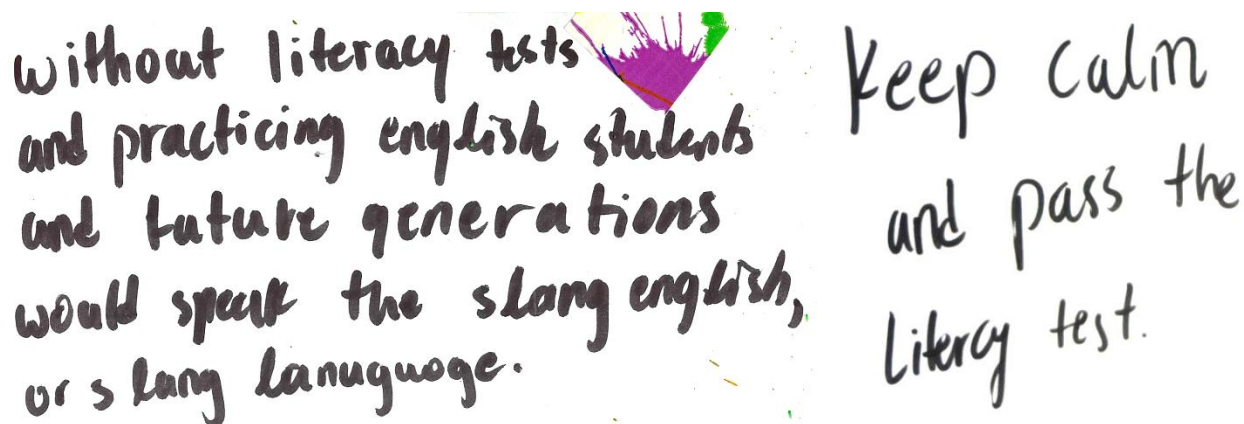


Figure 56. “Without literacy tests . . .” on the “OSSLT” Graffiti Wall – Contribution by Sabrin [Left]

Figure 57. ‘Keep calm . . .’ on the “OSSLT” Graffiti Wall – Contribution by Sabrin [Right]

Many of the participants understood that the purpose of the literacy test was to ensure students had met the expected level of achievement in reading and writing prior to graduating. Bert, for instance, suggested that the purpose of the literacy test was to “make sure you have the certain capability of literacy,” and Cadi noted that the test results tell you if “in the eyes of the government” you are or are or are not “literate enough to be fully functional in real life society.” Cadi also stated, “I write it because we’re forced to, and I want to graduate high school. I think the purpose of it is just to make sure that students have the required literacy before leaving high school, which is a good idea.” Oliver though said he was “not really sure” what was the purpose of the test. He said, “It kind of seems pointless.” Oliver wondered, “What is the overall goal [of the test] that is different from the English class’s goal?” He thought the purpose of English courses was to make sure students have “a basic understanding” and the basic “capabilities” to be able to read and write, and he felt that the literacy test was “more of just a [. . .] reality check.” Oliver added, “It seems like it’s only invented to make people try their hardest, and for those that fail, by two marks, they’re not good enough, and there can be no exceptions.” Oliver said that the purpose of the test is to “make people feel like they can’t do what they want to.” It is concerning that Oliver did not see any value in the test, especially since not only had Oliver written the literacy test twice, but he had also completed the literacy course.

Experiences Preparing for the Literacy Test. The participants discussed their experiences preparing for the literacy test in terms of (a) their experiences in their English courses, (b) their experiences in their other courses, (c) their experiences with school-wide initiatives, as well as how, in a few cases, (d) they prepared for the test on their own. Their experiences preparing for the literacy test highlighted different ways through which the test potentially influenced some of the participants' educational opportunities.

Test preparation in English courses. Even though the literacy test draws on expectations that relate to many courses across the Ontario curriculum, the participants suggested that the majority of their test preparation took place in their English courses. In many cases, the participants reported that their English teachers incorporated at least a bit of explicit test preparation into their classes. Cadi explained that, in Grade 10, her English teacher took time to ensure that students had recent experience writing a newspaper article prior to writing the literacy test. Cadi explained, "like the week before [the test], [the English teacher] said, 'Okay, so you're probably going to have to do a newspaper article on your test, so here, read this story. This is how you do a newspaper article, hand me in a newspaper article.'" Cadi added, "And so that was that. And we never did one again in English class, so that was kind of pointless, I found." Oliver similarly claimed to have only noticed his English teacher start talking about the literacy test "the week before" the test. Reflecting on his experiences when he was in Grade 11 and going to be writing the literacy test for the second time, Oliver noted, "I think I had one day of prep. And that was a class, and that was just because my English teacher was being generous." Oliver said, "I think it was just me for . . . for it, because everybody else was . . . wasn't doing the test again." Anne explained that one day her English class was devoted to test preparation, but students were not really cooperating and, according to Anne, "it didn't really work out." Bert said that, in Grade 10, her English teacher focused on the literacy test quite a bit the month prior to the test. According to Bert, this was "to make sure [the class] knew everything that [they] needed to." She said, "That's basically all we did for the month, was focus on preparing us for the test." Donna also noted that they did "a lot" of test preparation for the literacy in her English course.

Ella and Sabrin emphasized that the English as a Second Language (ESL) courses they had been taking as newcomers to Canada played an important role in helping them prepare to write the literacy test. Sabrin said that her teachers "showed [them] tons of examples," and they worked through sample questions as a class. Since it was a small class, Sabrin said there was a

lot of attention on each individual student. According to Sabrin, her ESL courses also helped her prepare for the literacy test by helping her learn more about Canada and Canadian history, so that she could be better prepared to read texts related to Canadian culture on the test. She explained:

I learned that the ESL course, they help you a lot with your literacy, more than the actual English class, because like you're just learning English at that time, and they focus a lot more on the history of Canada. More because we don't know anything, so we can't just do some test. So, they did help a lot, and they gave us lots of booklets to work on, and they were like asking questions, like one-by-one you have to present a lot.

One of Sabrin's criticisms of the literacy test was that she felt there were culturally-specific details present on the literacy test that newcomers to Canada might not be familiar with.

Test preparation in other courses. Although, as noted in Chapter 7, the participants were able to identify many instances where they were engaging with literacies in a number of their courses, when the participants spoke about how they were preparing to write the literacy test, they did not reflect on any of these activities or on how these activities might have been helping them prepare to write the test. When the participants considered test preparation, the participants focused on moments of explicit test preparation rather than activities through which they were learning in ways that might have also helped them prepare for the test. According to many of the participants, when their teachers in subject areas other than English or ESL referred to the literacy test, the teachers' comments were mostly about wishing the students luck on the test. For instance, Bert said, "It was basically like, maybe, like 'Have fun at the literacy test tomorrow,' but there was nothing, like, no one talked about it." When asked if she prepared for the literacy test in any of her other courses, Anne said, "Not really. They were like, 'Good luck!'" Sabrin also said, "They were just like, 'Good luck!' And like just, I'm not sure, 'Be patient' and stuff. Yeah." Oliver, on the other hand, noted that sometimes his teachers would highlight similarities between what they were doing in class and what students might see on the literacy test. He explained, "They did talk a little bit about the literacy test, a little bit, but it was more like, when something came up that was on it, they would be like, 'This is what you are going to do,' and then that was about it. That was about as much warning as we got." Most of the participants seemed to feel as though most of their teachers did not talk about the literacy test or show any investment in the testing practice. Cadi, for instance, explained, "[T]hey mostly don't care to be honest." According to Cadi, "It's pointless to them really. It has nothing to do with them. They're just like, 'Well, if you fail, there's nothing we can do really.'"

School-wide initiatives to prepare for the literacy test. In quite a few cases, the participants mentioned they completed a sort of mock literacy test in preparation for the literacy test. These practice tests seemed to be part of school-wide initiatives for all of the students who would be writing the literacy test that year. For example, Cadi explained:

There was just one time where we had a package, like a literacy test package that we did in math class once. Like it was just whatever class you had at that time, you got to do a practice run, just to see what was on it, but you didn't get it back to see where you need to improve or anything, so it was kind of just showing you what to expect.

Cadi explained that she thought they did this practice test "just to get a feel of it." She continued, "but we never got them back, like, so it was kind of pointless." According to Cadi:

It was basically just teaching us to deal with writing and writing in the time limit. Like giving us a taste of it. But, with no results, you don't see where you went wrong, or if you're going to pass. There was really no preparation. And they kind of just like they didn't really announce when it was going to be either. It's like a week before, okay, literacy test next week and everything. No preparation or anything.

Finn also said that he did "one booklet" in class to prepare for the literacy test, and he did not get his work back with any results. In addition to the school-wide practice tests, some of the participants noted that there were other types of programs being offered. Anne said there was a half-day workshop offered at her school. Anne said, "they went over what to expect on the literacy test, like what kind of questions to expect, how would you do them." She added, "That was good. That was really helpful." Anne also said she learned "what to expect, and the way to write, and to calm down a bit." The workshop was held during a school day "[a]bout a week before the Literacy Test." Porsche explained that they have an independent reading program at her school, and some of those dedicated blocks of reading time were replaced with explicit test preparation prior to the literacy test. She explained that there was usually a dedicated time in class for independent reading, but for two weeks, in preparation for the literacy test, that time was spent practicing sample OSSLT test items. Reflecting on her experience with the literacy test, Porsche explained, "I used to actually read a lot. Like last year. I think that helped a lot." Thus, it is rather ironic that it was independent reading time that was replaced with explicit test preparation at Porsche's school. Porsche said, "I don't think, like personally, the practice didn't help me." Although practicing skills is important, it seems as though the ways in which one might choose to practice their skills, and the skills in particular that an individual chooses to

focus on, is important. Sabrin explained that her school offered an after-school program to help students prepare for the test. She said the program was offered two days a week starting in January, and it ran up until the literacy test, which typically takes place in March or April. Sabrin found this program to be quite helpful.

Preparing for the literacy test individually. Not many of the participants shared comments about how they prepared for the literacy test independently and outside of their courses. Some of the participants expressed that they were not sure how they could prepare for the literacy test. Cadi, for instance, stated, “Well, there was no way really to prepare.” Cadi did not seem to consider that there might be ways that an individual could work on enhancing particular skills independently and prior to having to write the literacy test. When asked if she was aware there was a website with student resources available, Cadi replied, “No, I had no idea.” Cadi thought it would be helpful if the school informed students about these resources; however, she added:

. . . but I personally wouldn’t use them, cause I don’t think, like I didn’t need them. A lot of people, if they are worried, like if they are okay students, but they are worried that they are going to fail it, then they’ll go online and use the resources, but I wouldn’t bother. I’d just be like, “No, it’s too much work.” And then people who are probably going to fail, and they do okay in English, they’d probably just: “Whatever, I’m not going to.” But I do think we should be informed about it, so that people can choose if they want to, to help raise their marks a bit maybe before going into it, prepare.

Bert also said she did not do anything to help prepare herself to write the test. Bert noted that she did not know there were online resources available for students either. If she had known, she said, “Well, I probably wouldn’t have [consulted the resources], because . . . I don’t care enough. But, I would say it [would be] probably good to tell people, because some people probably care.” Like Cadi, Bert also seemed to think that students “can’t really prepare for” the literacy test. She continued:

So, it is the most irritating test, cause you can’t prepare for it, and you rely on your teacher to make sure you know everything, which is like . . . We don’t know everything. Because we don’t usually like go through it all in class, and if you can’t practice, then it’s just like, it’s even more stressful, cause you don’t know what’s on it, and you don’t know what to expect, and you are just sitting there, and you’re like, “I don’t know what I know. I don’t know what I need to know.” Kind of freaking out.

Bert suggested that students rely on their teachers to prepare them for the literacy test. Not being prepared, or not feeling prepared to write the test, can be a source of stress going into the literacy

test. Oliver was also not aware that there were online resources available, and he was not sure if he would have used them. He said:

Probably not, because every time I've taken the test, I've had an English class that semester and English class is supposed to prepare you for stuff like this, not say this is what you have to know but we're going to teach you something else. They should be there to help you.

Sabrin's teachers provided her with many resources and a considerable amount of support it seemed in advance of the test, so Sabrin felt that she did not need any additional resources.

Donna mentioned that it is possible that her teachers told students about the online resources, but Donna was not certain if she used any of them. Anne was also not certain. Consulting additional sources on their own and independently working towards preparing for the literacy test did not seem to have been a priority for the participants. Ella, however, was an exception. Ella took the initiative, and she made sure she would be ready for the literacy test. Ella realized that she had a lot of work to do to be able to successfully complete the literacy test. She explained, "We did one [practice test] package, but I had to do more, because like I had no idea what was going on." Ella explained that she found practice questions online, and she relied on the guidance department at her school to help her. She said:

I actually asked at the guidance how can I find it online, and they helped me. I just looked at the samples, and like tried to learn how to write an essay, asking them questions, how should I write an essay or like a report. Yeah. They helped me.

Ella added, "[F]or the literacy test, I had to learn how to write an essay, a report, and everything before doing the test, so I prepared for the test."

Experiences Writing the Test. The participants shared many thoughts and reflections about their experiences writing the literacy test. In particular, they critiqued the testing process, the format of the test, the content of the test, and what was being asked of them as test takers.

Mentally and physically demanding process. The length of the test and the amount of time that students were given to complete the literacy test was a topic that was frequently addressed by the participants when reflecting on their experiences writing the literacy test. Finn said he was "not used to writing the literacy test," and he reported feeling "uncomfortable," because he "was not use[d] to writ[ing] for long periods of time." Finn stated, "The first booklet's like twenty minutes, and the second one you have to write the essay, and then you have to answer so many questions, your hand just gets tired." He said the test is "too long." Finn mentioned that he found

writing the essay in particular to be difficult because of “how much time it takes.” He also said, “And some of the work is so hard, I barely can even do it.” Finn did not write the literacy test in Grade 10, which is the year in which students typically write the test for the first time. Finn said, “Because I wasn’t doing very well in class, so my vice-principal before, she didn’t want me to do it. She’s like, ‘You don’t have enough experience.’” Porsche also noted that she thought the test was “Long” (see Figure 58). The poem she wrote about the OSSLT in her journal though potentially gives a different impression of how writing one single test can also be quantified as being a brief life experience (see Figure 59). Although for both Finn and Porsche English is not their first language, it was not clear if either of these participants received additional time to complete the literacy test.



Write a song or poem about the OSSLT/ the literacy test.

I did the OSSLT in the
Past

I'm glad it went by so
Fast

Figure 58. Porsche’s Contribution of “Long” on the “OSSLT” Graffiti Wall [Left]

Figure 59. Porsche’s Journal: A Poem About the Literacy Test [Right]

Having additional time to complete the test is intended to be an accommodation to support students who have additional challenges to overcome, such as working in a language that is newly acquired; however, for some students, such as Ella and Sabrin, being asked to perform for such a long period of time on one day and under high-stakes conditions seemed to be a very trying experience. Ella thought writing the literacy test was a demanding experience even though she said she “was ready for it.” She reported bringing “a piece of chocolate” to help her through writing the test. On the project questionnaire, Ella wrote, “Despite all the effort, I got so tired specially for the second half of it and was trying to finish it as soon as I could.” Ella’s description of her experience taking the OSSLT is presented in Figure 60.

Question 4. Describe your experience(s) taking the Literacy Test (OSSLT).

I was so ready for it, I prepared myself for the test and checked the literacy test's website to get more familiar with the questions and formats. I brought a small piece of chocolate in case, too. ~~B~~ Despite all the effort, I got so tired specially for the second half of it and was trying to finish it as soon as I could.

Figure 60. Ella's Description of her Experience Taking the OSSLT (Project Questionnaire)

Despite all her preparation, writing the OSSLT seemed to take a toll on Ella. She stated that she "wanted to cry through it." From Ella's perspective, "[N]o one really likes to write the Literacy Test. It's like four hours sitting there like writing." As an ESL student, Ella seemed to have been provided with accommodations while writing the literacy test, including being given significantly more time to complete the test. It is possible Ella received double the allotted time, should she need it. Ella recommended that the literacy test be "shorter because the effectiveness of students' work decreases as they're sitting there for a long time writing the test." Sabrin said that she received additional time to complete the test. Sabrin said, "since I was in ESL, and I was writing the test, they gave us extra hours, double the time, which is like five hours, they gave us." She said the five hours was all in one day, and she added that she found having extra time was beneficial but also tiring. Sabrin seemed to find the process of having to "review and go back and forth" through her responses to be demanding. She said at one point she just felt like, "No, I can't just not do this no more."

English is Bert's first language, but she also stated that she found writing the test within the usual timeframe of two and a half hours to be demanding. She said, "Sitting for long periods of time thinking, reading, and writing can be exhausting," and she said, "if I can change anything,

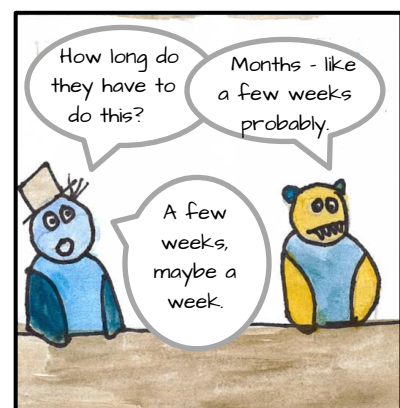
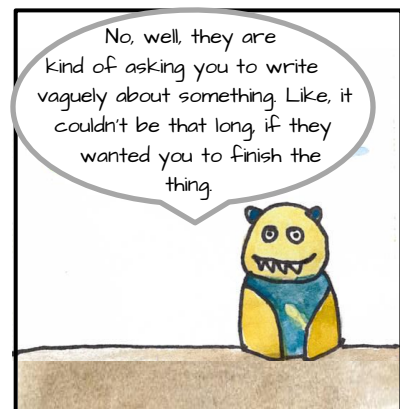
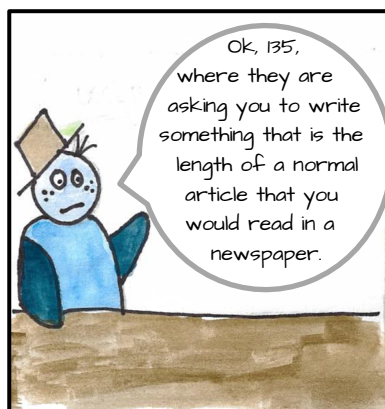
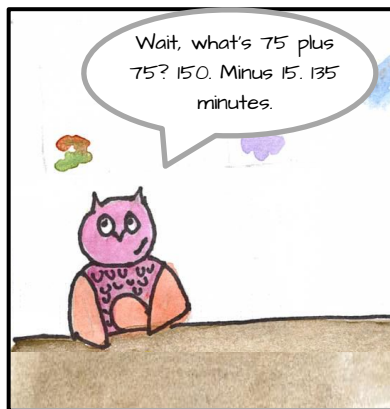
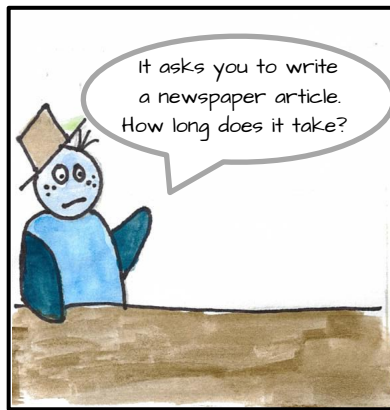
it'd be [to have] it over a week. Not all at once." Cadi replied saying, "Oh, I think a day is fine," but Bert clarified, "No, I said a week because of my hand gets sore so easily," which Cadi agreed with. Bert also noted that when writing the test, "you get tired, and you want this to be done."

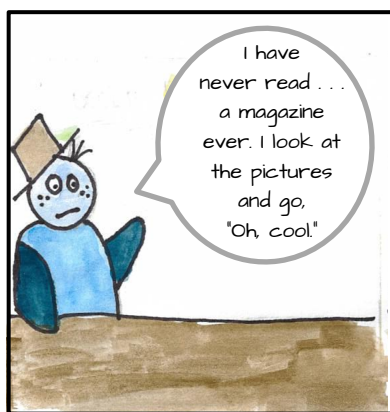
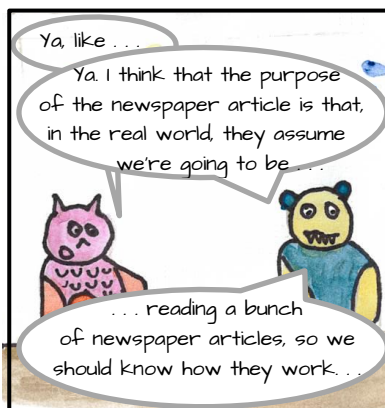
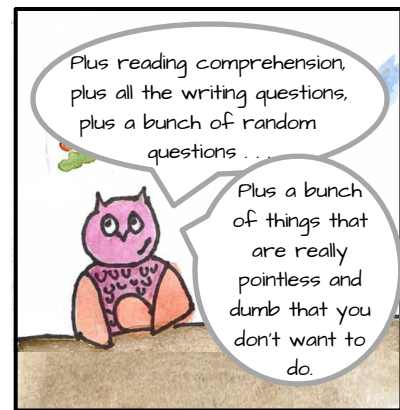
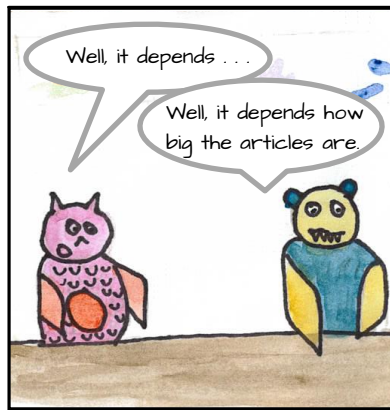
Lack of time and unclear expectations. Although quite a few of the participants commented on the length of the test, Cadi seemed to feel quite strongly that she was not provided with enough time to be able to adequately complete the test to the best of her abilities. Cadi explained:

I always feel rushed to finish tests. I have a lot of stuff to write and I like to have it, like, I like to think about what I'm writing, and have time to lay it out properly. Then again, if I'm given lots of time on school work, I'll do last minute. It's just for on the spot school stuff, I like to have more time.

Cadi would have appreciated the opportunity to be able to "lay [. . .] out" her thoughts "properly." In the case of the literacy test, it seemed to be clear to Cadi that she was going to have to work quickly to just get her responses down on the page. In her journal, Bert wrote that the literacy test "is a waste of time even though some people don't have enough time." Bert was suggesting perhaps that students need additional time to be able to effectively demonstrate their literacy skills, but she did not think devoting additional time to the testing practice would be a worthwhile use of students' time. It seemed as though some of the participants felt they had to modify their literacy practices to be able to ensure they could complete the required tasks in the allotted time. After the graffiti walls activity, Cadi, Bert, and Oliver discussed the demands of the test in terms of the time that students are provided to complete the test (see Figure 61).

Cadi, Bert, and Oliver agreed that students are not given enough time to be able to demonstrate their thinking on the literacy test. They also seemed to be perplexed and a bit frustrated with what they were being asked to do on the test. Cadi commented on understanding why being able to deconstruct or analyze newspaper articles might be beneficial to youth, but she was not sure why writing an article was a productive activity for the testing context in particular. Bert seemed to think there was not enough space provided for her to provide detailed enough responses or for her to work through her thoughts. Oliver could not understand why students were being asked to complete a task on the literacy test that people are usually provided more time to complete in the 'real world.' Oliver noted that even though they are given insufficient time to adequately complete the required task, detailed responses are required. Oliver suggested that the conditions in which he was being given the chance to try to reach the expectations were not reasonable.





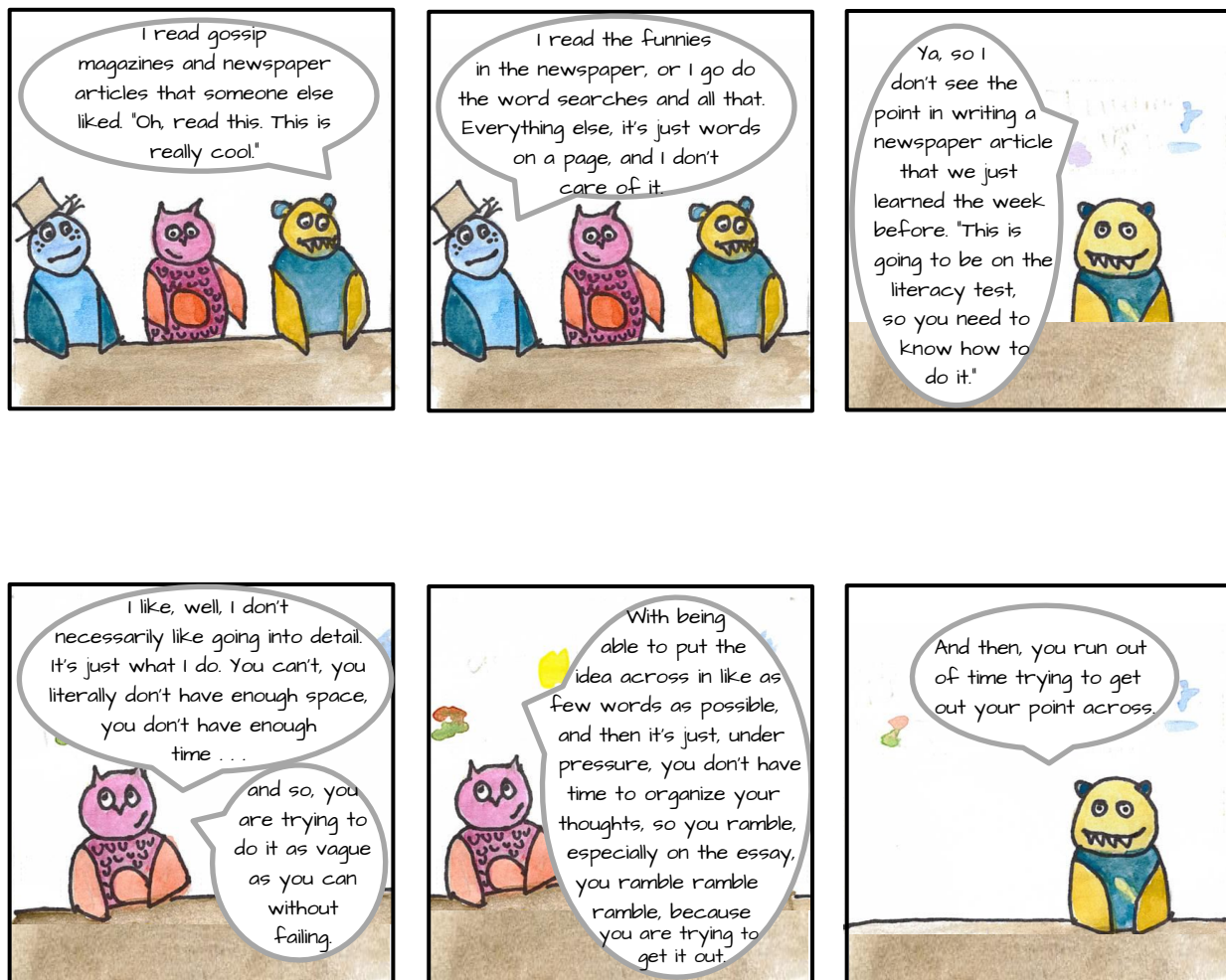


Figure 61. An Excerpt of a Discussion Following the Graffiti Walls Activity With Oliver, Bert, and Cadi Presented as a Storyboard

Bert took issue with having to write an essay in particular given the amount of time they had available. She said:

I feel like maybe that's an okay thing to have on the literacy test, if we had more time, cause essays, well it depends on the quality of essay they want, it does take time, and editing and everything, but yet you are expected to, like and we don't know how they mark them, so we don't know necessarily how tough they are going to mark them, and so like we want to try hard, but we kind of can't, because we don't have all of the sources available that we usually do, or the length of time, usually. Well, it depends on the class, but sometimes you have like a week to write an essay, so trying to write it in half an hour, you get really bad essays. So, it's not even a reflection of the person's ability, so it is not really fair.

The participants seemed to struggle with understanding what quality of work was expected of them. They also seemed to struggle with understanding how it could be that they were being

provided a context that does not permit them to be able to perform to the best of their abilities. To mediate the time constraints, the participants seemed to be modifying their literacy practices to be able to simply complete the required tasks, whether or not they felt their performances were reflective of what they could achieve were they given more time and space. Given the participants' reflections, it is unclear how OSSLT test results could ever accurately reflect these students' literacy skills given all of the restrictions they felt were affecting the written products they were able to produce.

Lack of resources and difficulty generating material. Another issue multiple participants commented on when reflecting on their experiences writing the literacy test was the challenge of working independently. In particular, participants commented on not being able to ask questions while writing the test. Finn commented on not being able to receive any help while writing the test. He said, "The assessments at school are nothing like at home." Finn explained that when he is at the youth program site, he is able to receive help when completing his school assignments. Bert also commented on the isolation that students experience while completing the literacy test. Bert said:

[S]ome people may do good in class and whatever cause you can interact with the teacher and ask them questions and get like everything explained, or help, or whatever that's required, whereas the literacy test, you are like . . . alone, relying on like your brain to try and remember all of these things, and under all the pressure your brain just decides, "Hey, I'm not going to work."

When engaging with literacies, the participants seemed to have been used to being able to talk with others, to ask questions, and to clarify and to verify their understandings.

Oliver also felt that many of the questions on the literacy test were confusing. He said:

They are confusing. The questions are completely out of place. Like, I don't know people that would ask questions in the form that the test does. Like, at least with a person, or in a class, you can stick your hand up and say, "What do you mean by this?" or "Can you explain, can you elaborate?" With the test, you can't do that apparently.

Bert also said that some of the questions were confusing and the wording of the test items, in particular, made it difficult to complete some of the tasks on the test. When working through the sample OSSLT test items that were provided to the participants, the one test item that seemed to receive the most attention from the participants, despite resulting in the fewest written responses being submitted, was the long-answer response question. This test item was an example of an

essay-style opinion piece (see EQAO, 2013g). The participants expressed that they struggled to understand the topic they were asked to engage with. Bert, for instance, said, “I don’t know what it’s asking.” Since the participants struggled to make sense of the topic, it seemed to be that much more challenging for them to be able to present an opinion. Bert also explained that she found the graphic text “kind of confusing to follow,” which made answering the questions challenging. She added, “it’s just the most confusing thing I have ever seen.” Bert said, “there is so much information on it, and it is not organized how I would personally organize it.” Cadi said that some graphic texts are a bit confusing, but she said she just has to “read over it a bit” to be able to make sense of that kind of text. Cadi added, “But I know for a lot of people, this would be looking at like nothing.” Cadi seemed to think that the numbers incorporated in the graphic text in particular might overwhelm some students. She thought reading and responding to questions for this type of text was a productive task to ask students to complete on the literacy test though. Cadi said:

Definitely like the map thing with all of the statistics and stuff, that’s really good, because we are going to have to be able to read a lot of those for like hydro bills and stuff like that for the future, and be able to understand them [. . .] However, in English class, we don’t look at those often, so that’s why they are hard for us to understand, cause we don’t see them really. The only reason that I see them is cause of the news and stuff like that. Like, in class, I guess a bit, but barely. Like, we know how to write essays more than we know how to look at maps and statistics and stuff like that. So, I think that is a really good idea to put that in the literacy test, because that should be considered literacy, or we should cover it more in school.

In addition to struggling to make sense of some of the test items and the provided texts, Oliver and Cadi also explained how it was challenging at times to generate responses to some of the questions because of the topics provided. For the opinion piece, Oliver noted that he simply did not have an opinion either way, and as noted in his case overview, Oliver was not interested in writing inauthentic texts. Oliver was critical of the topics being offered up for discussion on the literacy test. He said numerous times that he just did not have an opinion in response to the prompts and questions provided. He said, “You ask me the right question, and I’ll just throw everything I have at it.” Cadi felt that some of the questions required previous knowledge that not all students would likely have either making it challenging to complete the required tasks. She highlighted a question that had to do with local environmental issues in particular, and she suggested that because she listens to the news, she eventually was able to think of something she could write about. She lost some time while trying to write the literacy test just trying to come up

with ideas that she could write about though. Cadi said, “questions like that, where you just can’t think of something right away to write on, it wastes more time.” Cadi said,

I find a lot of the questions ask you to, like they ask you to talk about current issues too. Like if I didn’t watch the news all the time, I would have no idea what they were talking about. Cause like yeah, like, so like a lot of people don’t watch the news, I just, it’s just I’m forced to, cause I like TV and my parents watch it at six [. . .] Yeah, so, a lot of people likely don’t. They aren’t up to date on current stories. And a lot of the stories are about current issues. If they have no idea what’s going on, how can they relate to them?”

Cadi later extended her critique when she said:

Like a lot of the questions too, it’s like, if they had asked me a different question, I could have written a better answer too. Like it depends on what you know. Like when it’s like umm, there was one question, it was like, write about an environmental issue that is affecting your community or something and like, it’s like, okay, you are trying to think of something, but like people can blank. Like, I blank all of the time.

Oliver seemed to also need to see value in what he was writing, and his comments suggested that he needed to be interested in the proposed topics, otherwise he might struggle to generate content he could write about. Quite a few of the participants spoke about leaving responses on the test blank or incomplete because they simply could not think of anything else to write for either the news report and/or the opinion piece. Donna, for instance, explained how she found it difficult to come up with content to write in response to the prompt for the news report on the literacy test in particular. Donna said that she finds it easier to write essays than news articles. She explained, “News articles are a lot harder to write on the top of your head. Essays are a lot easier.” She continued:

News articles are just . . . to properly write one . . . It’s just, they seem really hard and stuff. Because I think on the literacy test, I wrote like a paragraph for the news article, and then I gave up, because then I couldn’t think of anything else.

Writing the right answers. Cadi was quite critical of some of the issues selected as topics for the literacy test, and more specifically the ways in which the issues were being presented. She was particularly critical of the opportunities, or rather the lack of opportunities, for students to be able to engage with some of the issues being presented. For instance, there was a text about polar bears and Cadi felt limited in what she was able to express in her responses to the questions on the test that went with this text selection. When it came to responding to the polar bear questions, all Cadi was asked to do on the test was state the main idea of the text and support her response

with examples from the provided text selection. Cadi was not provided with any space or opportunity to challenge the text selection. She felt that those responsible for the literacy test “should take more care in choosing issues [they] want students to write about.” Cadi noted that she had done research on polar bears that she felt did not align with the ideas that were presented in the text on the test. She was not able to challenge the main idea of the provided text though. Cadi said:

All the response questions and things that you had to read and write a response to, they were all pretty well, like, like you know exactly what they want you to say—well, mos—I know what they want you to like write for it basically. Like for the polar bears, they want you to say that it’s bad. Like you know what the main idea is, so they want you to write it out, and say that.

Cadi said, “They want you to write a specific answer, and if you write your own thing, they can mark you wrong on it, and say it’s wrong, even though it’s your own opinion.” Cadi seemed to recognize that she had to make sure she provided a response that aligned with the question being asked, but she also seemed to be a bit frustrated when she was not able to critically engage with the texts before her. She did not feel like she was able to share her own knowledge and understandings. Instead, she simply had to locate information based on the texts that were provided and repeat only that information back in the space provided. There was limited space and time for Cadi to be able to reflect, which meant that she just wrote whatever responses she could come up with most expediently whether or not they aligned with her personal beliefs and understandings. She also noted that she did not have access to resources that could help her write responses that were more critical. Cadi recognized that using additional sources to support her ideas was important, but she explained that this was not an option on the literacy test. Cadi also tailored her responses to fit what she thought the evaluators would accept as being the ‘right’ responses. For Cadi, this meant responding in ways that she felt would align with what she thought the majority of people would think. Cadi was aware and she was sensitive to the fact that her responses were going to be evaluated, and she was concerned that there would be an expected and correct answer that the evaluators would be looking for. Cadi withheld some of her more controversial thoughts and ideas.

Cadi’s experience with the literacy test seemed to limit how she preferred to engage with literacies. The testing practice somehow seemed to be instilling in Cadi the belief that providing expected responses and ideas that conform with what a majority thinks are more likely to be

accepted and awarded advancement in life, which in this case, was eligibility towards graduating from high school. When talking about her experiences responding to the test items, Cadi said, “I just wrote what, like you know, they want to hear.”

Perceptions of What Was Evaluated Through the Literacy Test. Most of the participants expressed their understanding that the literacy test was being used to evaluate students’ reading and writing skills. Some of the participants did not explain how reading and writing could be elaborated as discrete skill sets that could be measured and evaluated though. The participants were not familiar with the term *evaluation criteria*, and they seemed unsure how test performances were being assessed. On the graffiti walls handout, which asked the participants if they could explain the literacy test’s evaluation criteria, Ella wrote, “No. I did not understand how and based on what did they evaluate us.” Oliver was also not sure how his test performances were being evaluated. He said that he felt his work was being “marked ten times harder” on the literacy test compared to how he felt his work was evaluated in his English courses though. Bert similarly noted that she felt the test was “harsh” and “strict.” Oliver suggested that it was possible he made spelling errors on the test, which would have negatively impacted his score, but he did not think his spelling errors alone should have made him ineligible to graduate. Oliver also mentioned that he had difficulty generating content to be able to respond to the test items, and he felt it was likely that he did not write responses that were long enough.

Some of the participants were able to identify particular reading skills and/or writing skills that they thought were being evaluated through particular test items though. Cadi said she thought she knew what the literacy test was “looking for,” and she said, “I wrote my answers accordingly.” Cadi explained, “Well, the literacy test, it kind of wants you to say what you are thinking and stuff, and it wants to be able to say, ‘Well, okay. This person has a grasp on reality,’ basically. Literacies and reality.” Cadi felt that “You should be able to read a story to be able to say what you think about the story.” Cadi was quite strategic in how she went about completing the literacy test, including writing texts that she felt would be more efficient to write in the allotted time, and also writing responses that she felt were more likely to align with the ideas and opinions of those evaluating her work. Cadi was aware she was writing for a particular audience, and also that she was writing for a particular purpose, which, for her, was to pass the literacy test.

When reflecting on how her test performance might have been assessed, Bert said:

[W]e, I guess, just sort of assumed that all the criteria is making sure, for like the article, making sure that you have your who, what, when, where in your open thing, and then like how in your body paragraphs, and then quotes and whatever. And then your essay, like your topic sentence, introductory and like all the like, the criteria for essays. I guess it's just assessing that you know that.

Bert was focused on the organization of texts and the inclusion of sufficient detail and support for the ideas being presented in her work.

Cora thought the news report was a good test item, because, as she explained, “you have to, like you see the picture, so you have to make something and you have to be like creative.” Cora said, “it's like evaluating how creative you are, how can you just brainstorm facts and stuff.” For the essay, Cora said it's evaluating “how to write and how you put your ideas on paper. She said, “you have to put some strong points to support your thesis,” and because of “the format [in which students] are writing,” they are showing that they “know how to write an essay.” She added, “And the vocabulary you use, the punctuation. I think that should be enough.” Cora also mentioned that “writing is not the way that you talk.” She said you “have to change it, the structure and everything.” So, on the test, “they want to see, are you able to do that.” Cora's concern with the format of the test was that she had to spend a lot of time reading and working on the multiple choice questions, so she did not have enough time to spend on her written responses. She explained, laughing a bit, “because like, there are a hundred, I don't know how many, short stories that we have to read here. So, instead of wasting your time reading this and answering these questions, you can focus more on writing that,” referring to the two long written response test items. Cora felt that having only a news report and an essay to write “would be more successful” as a test format. Cora's suggestion would mean that reading comprehension would not be assessed. Only writing would be assessed. Even though Cora was not in favour of having the multiple choice questions on the test, she did seem to recognize what was required of her when responding to some of these questions. She recognized, for instance, that sometimes she could not find any explicitly stated information within the provided text that could help her respond to a question, and, in those cases, she had to “read between the lines.” Cora recognized that the test, especially in the case of the multiple choice questions, she said, was assessing “[m]aking connection to different point.” Cora explained:

Because like some of them are so tricky, and somehow like you have to make connections, you know like, you have to like see these answers here, and like I have to look for them, and sometimes you can't even find them. So, you have to read between the lines and stuff.

Donna and Finn also focused on writing when explaining what they thought was being assessed through the test. Donna said that she thought the test was assessing “how well you can write,” which could be measured based on “[w]hat kind of words you use.” When I asked Finn what he thought the literacy test was assessing, he replied, “Your learning skills and your writing, development of writing skills. To see if you take the time to read every question, instead of rushing.” Donna was also aware the test was assessing reading.

When Porsche suggested that the OSSLT could evaluate students based on just “a one page essay,” I asked her what skills she thought would be assessed through the essay, and Porsche stated, “writing,” “how you support what you say” meaning “your points,” and “how well you connect your points, and how you, how well you communicate.” She also said it is about “how well you understand” the text you have read and whether or not “you can pick out specific points and write [inaudible].” Porsche’s comments are very similar to what is evaluated through the OSSLT, and she seemed to focus on the application of technical writing conventions. When commenting on her literacy skills, the ways in which Porsche wrote about the literacy skills she believes she has, the literacy skills she struggles with or finds more challenging, and the literacy skills she wants to improve (see Figure 62) also closely paralleled the literacy skills that are prioritized by EQAO. Porsche did not explicitly make connections with what the literacy test assesses though when she mapped out her skills. An Individual Student Report (see EQAO, 2015n) is provided to each student who participates in writing the literacy test. This report outlines the skills assessed on the test and reports on a student’s achievement in meeting each of the expectations. The language used is very similar to what Porsche wrote on the literacies graphic organizer when self-assessing her skills and when listing her goals. For instance, on the sample ‘Successful Result’ report released for the 2015 OSSLT, the statement for reading achievement states:

Your results show that, in reading, you: are able to understand information that is clearly stated; are able to connect ideas from different parts of a text and making conclusions; are able to connect ideas from a text to your own ideas to interpret and make judgments about what the text is saying. (EQAO, 2015n)

The statement for writing achievement states:

Your results show that, in writing, you: are able to develop a main idea with enough supporting details to be easily understood by the reader; are able to organize and order ideas

in a clear, understandable way; are able to use correct syntax, spelling, grammar and punctuation to make your writing clear. (EQAO, 2015n)

It is possible that the literacy evaluation tools Porsche has been exposed to at school, both in her courses and through the literacy testing practice, have had a cumulative influence on how she self-assesses her own skills, as well as influencing which skills in particular she focused on when thinking about her literacy skills. Given how significant it is that students are able to demonstrate the six specific skills identified by EQAO, it was concerning that most of the participants struggled to articulate how their literacy skills were being evaluated through the testing program. Although some of the participants' comments aligned with what was being measured through the literacy test, there were also gaps in what each participant highlighted.

Literacy skills you have:	Literacy skills you struggle with or find more challenging:	Literacy skills you want to improve:
- I can read and ~~create~~ information from a text. - I understand the idea and can identify details used. - I can write essays and support my arguments.	Connecting the information I read with real life situations.	- Writing more sophisticated - Applying knowledge and being able to answer indirect question on a concept.

Your current literacy goals:

Connecting the information I gather from a text to real life or indirect questions. Also, be able to communicate wiser as well as understand the meaning behind everything in a text.

Figure 62. An Excerpt of Porsche's Literacies Graphic Organizer

Perceived Value of the Literacy Test. The participants had a lot to say about the value of the literacy test. A few of the participants expressed that they felt reading and writing skills are important, and, because of this, they thought the literacy test was valuable. For instance, on the

graffiti walls handout, Cadi wrote, “I think the test is important because it is necessary for a person to be literate in today’s society. Reading comprehension (understanding what you read) and being able to convey ideas through writing are important to function in society.” Donna similarly wrote, “The test itself is important because you need these skills in life,” and Porsche wrote, “It is important since its basic english and its needed later on in life” (see Figure 63).

d) What do you value about the OSSLT? Is the test itself important? Which parts or aspects of the test are important? Why?

It is important since its basic english and its needed later on in life.

Figure 63. Porsche’s Thoughts on the Value of the Literacy Test (Graffiti Walls Handout)

A few of the participants focused on the testing practice and what it could offer students. Ella, for instance, wrote, “It is a good test for challenging your reading/writing skills.” Sabrin also thought there was value in having a literacy test to ensure that students were working on developing their language skills. Sabrin explained, “if you don’t have literacy tests, everybody would talk this way [referring to using slang language], so nobody would really understand.” She said that “when a test is coming up students will study and like practice more.”

When discussing her ranking of potential literacy influences during the words in a bag activity, for which she positioned the literacy test as the second greatest influence, Sabrin explained, “the literacy test helped me understand the importance of reading and writing and why you have to keep on practicing your English.” Sabrin explained how her perception of the value of the test changed as she prepared for the test. Sabrin said:

At first, to be honest, I thought it was pointless to study for the literacy test, and like, I mean say you have a 90 in all your other classes, but you’re just not good at English, and you don’t even need it for your program, and then all of a sudden if you have the literacy test, and you’re just failing it year after year, it’s just, what’s the point? Like, it’s not going to do anything for you. But I guess now, I guess it does help. So, we do more in English and stuff. With more [. . .] newcomers, it has helped them a lot too.

Sabrin raised an important consideration when thinking about possible benefits of the testing practice. She felt that the added emphasis on literacy and the explicit preparation for the literacy test was helping her, in particular as a newcomer to Canada, with the development of her language proficiency skills.

Some of the participants saw value in the literacy skills that they thought were being assessed, but they took issue with the high-stakes associated with the test. A few of the participants expressed that they believed there were other ways in which students' literacy skills could be prioritized and assessed. Anne wrote that the test "gives students an idea of how to follow skills of writing," but she did not like that it is "mandatory." Bert echoed the sentiment about the importance of the literacy skills that are being assessed, but she also wondered if the test was necessary. Bert wrote, "Being able to read, write and comprehend is quite important for life however there are other ways to test/assess this skill without a major test." Oliver wrote, "No, it is not important. If I pass my english class why do I need to pass this test if I can both read and write. The test is a pointless wreck that makes the people that fail feel bad and the people that pass don't care." On the graffiti walls handout (see Figure 64), Finn wrote, "Its very important." On the next question on the graffiti walls handout though, Finn wrote that he does not think students should be writing the test. When asked during an interview, if he thought it was an important test to write, Finn said "Yeah, in order, if you want to get your diploma, you have to do the literacy test, and if you don't do it, you don't get your diploma. And if you fail it two times, you take the course." Thus, when Finn wrote that the test is "very important," it is possible Finn was acknowledging that his test results would affect his educational outcomes meaning the test is important because it is a graduation requirement.

d) What do you value about the OSSLT? Is the test itself important? Which parts or aspects of the test are important? Why?

Its very important

e) What would you change about the OSSLT? How would you redesign this test? Why?

so students shouldn't rite it

f) Is this test an accurate representation of the literacy skills you think you need this year, and/or once you graduate? Why and/ or why not?

No

Figure 64. Value of the Literacy Test According to Finn (Graffiti Walls Handout)

Some of the participants had difficulty seeing value in the test because they did not understand how what the literacy test was evaluating differed from what was being evaluated through their English courses. Oliver, in particular, did not understand how the literacy test was a valuable experience. He did not understand how the purpose of the literacy test differed from the purpose of his English courses. He said, “Test it in class. Mark it off of that. Because either way, a student’s marked from a test. This is a test. The exam is a test.” Oliver was likely referring to the final exam for his English course. Oliver noted that not only is there the final exam for a course, but “there is throughout the entire year, or the semester” as well that could be used to inform an understanding of how a student is able to demonstrate their skills. Oliver noted that he is “a slow reader,” and he said he also struggles with writing, so for the literacy test, he said, “It’s just ridiculous how they do it, in my opinion.” Oliver said:

I would get rid of it completely, because there is no point to it. You pass your English class, and if you pass it with a reasonable mark, there isn’t a point to needing to take another test just to say, “Yep, you can read and write.” Hmm, I think your exam should have said that in the beginning. There’s really is no point.

Bert also seemed to struggle to differentiate between the test and her English courses. Bert said, “in Grade 9, you do everything that’s on the literacy test, but then you have to do it all again to prepare, but it’s basically the same as what you do in class. So, doing it again is kind of pointless.” Bert thought that the literacy test “doesn’t really show anything that’s not already shown in your class work or anything. It’s doesn’t show anything relevant or that you already don’t know.” Cora, who was unsuccessful writing the literacy test, also expressed not understanding why it was not enough to show that she was able to pass her Grade 11 university preparation English course (ENG3U). She said:

I failed it, so I have to take the test next year. And my score was 295. It’s supposed to be 300. Um, I think this is not the way they have to judge people at their literacy, how they read and how they can write. If your person is taking 3U class and 4U class, so like they know how to read and write, so maybe there are just small mistakes and stuff.

Although Cadi saw value in the literacy test, she noted that she was aware that the literacy test might not “give people the opportunity [. . .] to do well.” She explained:

The literacy test itself, it’s hard to say, cause like I personally think it’s a good idea for students to be marked saying that, “Okay, you’re literate, so you’re good outside of high school.” However, there’s a lot of students that are perfectly literate that fail just, because of the pressures of the test, or because they get like three minuses in Academic English, let’s say,

so they just lose by a couple of points, but you know they are perfectly literate. They're fine. So the test is kind of like, it's good, but it's bad. Like I agree with the premises of it, but there's just some people that can't take tests well, so, that have to take the literacy test instead [likely meaning the literacy course], so I feel bad for them, but overall, I think it's a good idea to tell that students are literate before letting them leave high school.

On the graffiti wall, Cadi also wrote, "There should be a way to determine if a person is literate B4 they pass high school but the OSSLT may not be the best way."

Porsche was critical of the extent to which she was able to demonstrate her literacy skills due to how 'strict' the test was. Porsche felt there were not enough options made available. She said, "What we did on the literacy test and stuff was way different than what we do in English class." She clarified to add that in English "you don't just read something," you also discuss it. The discussion portion and all other forms of engagement that take place in a classroom environment might collectively contribute to establishing different types of literacy experiences for students that draw on diverse literacy skills. Students are unable to demonstrate proficiency of many of these skills through the literacy test though. They also have a different literacy experience.

Experiencing the OSSLC. For students who are unable to obtain the literacy graduation requirement by successfully completing the literacy test, another option that is available to them is to take a literacy course (OSSLC). Only one of the participants in this study had experience with the OSSLC. Oliver successfully completed the OSSLC during the first semester when he was in Grade 12 after unsuccessfully completing the literacy test in Grade 10 and in Grade 11. Oliver did not think he learned very much in the course. He stated:

It would have been better to not have it as "You need this, or you don't pass." It would have been better as a, do it [referring to the literacy test], and then, give this information to your teacher, and then, have them focus on this in class, and see if it gets better by the end.

Oliver thought it would have been helpful if his teachers received specific feedback about his test performances, so that they could have helped him improve his skills. Instead, he had to take a course that he did not feel was specific to his needs. According to Oliver, "That test is one hundred times harder than the class." When I asked Oliver if he thought he would have been able to now pass the literacy test after having passed the literacy course, he replied, "I don't think anything would have changed." He clarified that his writing "might have gone up," but he does not think that would have "drastically changed much," because, according to Oliver, one of the reasons he likely did not do well on the test is because he did not write enough in response to the

questions. As explained in his case overview, Oliver was not interested in constructing inauthentic and meaningless responses simply to complete a task. Oliver seemed to think the literacy course would not have likely helped him improve, because, for him, it is more a matter of principle about writing authentic texts.

Perceived Influence of the OSSLT

The results of how the participants positioned the OSSLT as one of many potential literacy influences is presented in Chapter 7. There were numerous opportunities where the participants were invited to consider the potential influence of the OSSLT though. When analyzing the participants' perceptions of the literacy test's influence, I focused on (a) the participants' literate identities, (b) the participants' relationships with literacies, and (c) the participants' learning environments and their learning experiences.

Participants' Test Results and Their Literate Identities. Many, but not all, of the participants indicated that they expected to pass the literacy test. Sabrin was not at all confident that she would pass the test, and, even while writing the test, she said she thought to herself, "I'm failing this." When Sabrin received her results, she said she was "really happy that [she] passed." Cadi, on the other hand, said that she knows herself, and if she had received a failing grade, she would have been "horrificed." The participants' comments about their test results indicated that they were interpreting their results as a reflection of their abilities and their literate identities at least to some extent. Some of the participants referred to having a successful test result as one indication that they are literate. Bert considered how a student's test result could potentially influence a student's literate identity as well as their future literacy development. She explained:

If you're given a label, then you kind of become that label. Like if someone keeps telling you you're ugly or something, you're going to start thinking you're ugly. It's the same like, if they tell you you didn't pass or you didn't do very well, it's basically like, "You suck at English." So then you start doing bad in English, when you were a 90 student. You start getting worse and worse, because you feel like you're bad, because you didn't pass this test or whatever.

The two participants who received unsuccessful test results seemed to have difficulty understanding and coming to terms with their test results. Cora was unsuccessful when she first wrote the literacy test in Grade 11, and she expressed concern that her test results did not seem to align with the fact that she was taking the university preparation English course. Oliver also saw a disconnect between how he was used to being evaluated in a classroom context compared to

the high-stakes testing context. Oliver wondered what the rationale was behind “having someone write the same thing, but being marked ten times harder [than] their English class.” Cora reported receiving a score of 295, but a score of 300 is required. She thought it was likely because of “just small mistakes and stuff,” which she did not think should be “that big [of a] deal,” she said, “especially because you need that [likely referring to a passing score] to graduate from high school.” Oliver reported received test scores of 295 and then 298. Oliver seemed to think that he likely had issues with spelling that negatively affected his test scores, which he attributed to his dyslexia. He also noted that he probably did not write long enough responses, since he does not like generating inauthentic texts. Cora and Oliver did not comment on any concrete or definitive feedback that was meaningful to them. Instead, they were left wondering why they received the test scores they did, and they were unsure how they could go about working to improve their test scores and their skills. Oliver noted working very hard between the first time and the second time that he wrote the test. He seemed to have felt quite defeated that his efforts only resulted in a very small margin of improvement in his test score, which was still not enough to pass the test. Oliver explained that the first time he wrote the test unsuccessfully, he thought, “Okay, I’m kind of going to need to work on this,” but then he said, “but the second time that I did it, I put a fair bit of effort into it,” and when he found out that he only improved his performance by three marks, he said, “it put the thought in my mind that I really don’t care.” There was nothing Oliver felt he could reasonably do to change his performance on the test enough to be able to pass the test. When given an opportunity to explain if he is literate, and how he might know, Oliver did not refer to either the literacy test or the literacy course as potential reflections of his literacy proficiency.

Accuracy of the Representations. The participants had many mixed comments about how well the literacy test could capture their literacies in the present and how well it reflected the skills that they thought they might need in the future. Donna said that she thought the test was an accurate representation of her skills, and when asked if she thought there was another way through which she could have demonstrated her skills, Donna said, “I don’t think so.” Not all of the participants shared this perspective though. In fact, most of the participants identified a few different reasons for why the literacy test might not be the most accurate reflection of what they felt they needed and/or were capable of demonstrating under different conditions. On the graffiti walls handout, Bert noted that she felt that “the newspaper article is irrelevant,” because “[n]ot

everyone wants to be a journalist.” Bert also thought writing essays is not going to be a necessary skill for all students to have in the future. Oliver wrote, “I will never write a newsletter after I graduate. Why judge me on something I’m never going to do with my own free will?” Cadi, on the other hand, seemed to extend reading and writing beyond just the specific context of the tasks that appeared on the literacy test. Cadi thought that reading and writing, as well as communication and comprehension skills, were necessary for engaging in society. Cadi thought that being “able to convey ideas through writing,” which is a skill that is valued on the literacy test, would help her be “an effective member of society.”

Based on Anne’s reflections on her experience writing the literacy test, there seemed to be a bit of misalignment between the literacy skills that she has and what is valued through the test. Anne shared that she struggles with expressing herself in writing, and, since the literacy test is a written test, she felt it was difficult for her to accurately demonstrate her critical thinking and her comprehension skills. Anne said, “I just have a hard time expressing myself.” She said, “I can’t seem to express myself in like writing as I am to say talking and that kind of stuff.” Anne explained that she believes she does have strong comprehension skills though. Considering whether or not her OSSLT results were an accurate representation of her skills, Anne said:

Okay, my writing and like, mainly of my writing, yes. But I doubt like of understanding and internalizing this information, maybe not, because it depends on, the test marks people, it depends on how you express things, so some people are really bad at expressing stuff, they might not be good at . . . I don’t know.

Anne explained that she struggles with writing, and this was likely reflected in her score. She doubted that the literacy test was an accurate representation of “understanding and internalizing this information,” because “it depends on how you express things.” Anne seemed to believe that because she struggles with expressing herself clearly in writing, she was not able to effectively demonstrate the other literacy skills she might have, such as her ability to understand texts. Anne also suggested that there is redundancy with how her literacy skills are assessed through the test. She said, “I mean ‘read and follow instructions’ is good and all, but it gets to a certain point that it feels like you’re almost repeating the same questions and assessing the same thing.”

Quite a few of the participants focused on how the testing environment limited the literacies that students were able to engage with. Only certain questions can be asked (e.g., there is no oral communication component on the test), and students are also limited in what they are able to demonstrate due to a variety of constraints (e.g., time limit, space allocated, stress, fatigue).

Anne noted that “a test environment makes students stress too much.” Cora also indicated that “the stress and timing of the test makes students to fail the test,” and Cadi was quite critical of the time restrictions in particular. Cadi said:

It doesn't really give you, like all the stuff that we do there, it can't be reflected in a test that takes an hour to do. Because you can be perfectly literate in some things, but then not be able to get what you're thinking across on the test, or not finish it.

Oliver and Bert both recognized that the testing conditions could influence what students were able to demonstrate. Bert considered how having to write “under pressure” can negatively impact a student's potential test results.

Some of the participants felt that their English marks should be sufficient for determining whether or not they had acquired the necessary and expected literacy skills before graduating. They did not fully understand how they could be passing their English courses but failing the literacy test. Both Cora and Oliver seemed to struggle with making sense of their OSSLT test scores in relation to the marks they received for their English courses. Bert also thought the test was marked harder. She said, “Well, I passed. I passed English too. It's not . . . But, . . . It . . . It's probably like a fine representation of my skills, if not lower.” The participants did not consider that it was possible that a different set of knowledges and skills were being evaluated through the test with a particular emphasis on only a few specific skills, which could explain why their test results and their course marks differed. The participants recognized though that there were redundancies between what they have done at least once in their English courses and what was evaluated through the test, which is reflective of the intended design of the literacy test. It is possible these similarities compounded the confusion as to why the participants might not have received test scores that are similar to their course marks. Although the focus of the literacy test is narrow in contrast to the English curriculum, students are not wrong to want to be able to see some similarities in how they perform for the high-stakes context and how they perform the same tasks at other times throughout the year under potentially less stressful conditions.

A few of the participants suggested that the literacy test was limited in what it was able to capture, and they acknowledged that not all literacies could be measured through the test. Bert was critical of what was or was not being assessed on the literacy test. She stated, “You don't get measured on how well you are good at watching TV. Or how much you go on Facebook, or how much you text, or if you use non short forms. Or how well you are at crosswords.” Many of the

participants recognized that oral communication skills in particular, which seemed to be quite important to the participants, were not being assessed through the literacy test. Cadi suggested that certain literacies can be captured through some methods, but some methods may not reflect the full repertoire of what an individual can and cannot do or to what extent. Cadi noted, “some methods aren’t the best measures of literacy overall, I guess.” Porsche highlighted how on the literacy test, she was only able to demonstrate her literacy proficiency based on what was explicitly asked of her. She wrote, “[I]t is very limited. There is not much you can show but to do what they ask for” (see Figure 65).

f) Is this test an accurate representation of the literacy skills you think you need this year, and/or once you graduate? Why and/ or why not?

No, it is very limited. There is not much you can show but to do what they ask for.

Figure 65. Porsche’s Assessment of Whether or Not the Test Offers an Accurate Representation (Graffiti Walls Handout)

Perceived Influence on Relationship With Literacies. The participants commented on how the literacy test was influencing their relationships with literacies in a number of ways. The participants explained how the literacy test was influencing (a) how they were understanding and defining literacy, (b) how they were engaging with literacies, and (c) how they were focusing their literacy education and working towards developing their literacy skills.

Defining literacy. In a few cases, the participants demonstrated that the ways in which literacy was being defined through the literacy test was influencing how they were understanding literacy. Cadi, for instance, noted in a few instances where something that she thought might be literacy was not something being evaluated on the literacy test, leaving it unclear for her whether or not that skill she was considering was a literacy skill or not. In her journal, Cadi wrote that language might be literacy, as in learning other languages, but she was not sure, since that was not something she felt was reflected on the test. When conceptualizing literacy or literacies for this study, the participants shared understandings of literacies that moved beyond the literacy test’s focus on reading and writing to show that the literacy test was not the only resource from which they were developing an understanding of what literacy entails. Many of the participants mentioned that oral communication or speaking and listening had to do with literacy, but they recognized these skills were not assessed through the test.

Engaging with literacies. The participants recognized that how students were learning and being encouraged to engage with literacies in the context of the test was quite unique. Cadi seemed to be learning that there were right ways to respond to texts. The lack of access the participants had to resources while writing the literacy test was also frequently mentioned. Some of the participants highlighted how they were unable to ask questions while writing the literacy test, which they did not think was reflective of what it means to engage with literacies. Oliver said:

And it's not like we don't get that in reality. Like there's so many things the test doesn't account for. It says we can't have any help, but when we go into the real world, you can always turn to someone and say, "Hey, what is your opinion on this?" or "How would you do this?" The test completely gets rid of the opportunity to do that. It's sort of all real-world scenarios, and says this is it. This is the real-world, but around the real world is completely different.

Cadi commented on how students cannot do any research or use sources to learn and inform themselves as part of the process of responding to the questions on the test. Students were required to generate content and ideas because they needed to write something for the purpose of demonstrating their writing skills. Cadi mentioned that it was at times difficult coming up with something to write about though. It seemed as though the literacy test was teaching students that quick, uninformed responses are acceptable. First-draft writing, without extensive thinking or organizing of thoughts, is only one part of writing, and it omits many beneficial practices that would be helpful for students to learn and practice. Some of the participants highlighted that they did not have time to organize their thoughts, and, as a result, their writing was not as effective as it could have been. Bert, for example, said that her essays were all 'rambling.' Many of the participants mentioned that when they were responding to questions on the literacy test, they would often just go with the first thing they thought of in terms of content, their stance, and also in terms of what approach they would take for organizing their responses. Critical thought and reflection and intention when communicating were not being valued by many of the participants when responding to questions on the literacy test. Oliver, Bert, and Cadi all emphasized that they were not given the time or the space to be able to produce quality work that would mirror the conditions they would have access to in the 'real world' outside of the confines of the testing environment. Oliver, in particular, took issue with having to write inauthentic, fabricated

responses just for the purpose of filling space and completing an exercise. For Oliver, writing purposefully was important, but he felt the test did not value this.

Donna seemed to think that the literacy test was not expecting enough from students. She suggested that the test should be “a little bit more complicated”:

They make it really easy. Cause reading and writing is really easy. Like it's easy for me, so maybe it's not to some people, but I think they should make it a little bit more complicated [. . .] It's just easy. Everyone can read and write. You can read and answer questions, if the answers are in the text. It's easy [. . .] Like on the literacy test, maybe they should put more essays or more newspaper articles or something. I don't know.

Donna suggested that students do not actually have to read the text selections to be able to respond to the questions. She explained that for one of the sample multiple choice questions that was paired with a short reading selection, “You don't have to read it [. . .] You just have to flip back to like line 10 [. . .] That word. They're asking what that word means in that sentence.”

Donna's comment suggests that she uses reading strategies, and she understands how to engage with textual features, including line numbers, to locate information within a text. Donna seemed to think she should have to think about a text more than the test items require though.

Focusing literacy education and literacy skill development. A few participants noted that the literacy test was helping them focus on improving their literacy skills. These participants seemed to be making decisions about which literacy skills were important and what in particular they should focus on based on what they believed was most valued on the literacy test. Quite a few of the participants spoke about focusing on spelling and grammar in particular. Sabrin even said, “I found out that I am not good at grammar and multiple choice in English, and I did not know that before.” Sabrin noted that seeing examples of essays that included “big words” prompted her to want to “take a dictionary and learn some more words right away.” Sabrin explained how practicing essay writing, and in particular seeing examples of other students' work, helped her learn more about how she could improve her own work. She also stated:

I think it's very good to do that [likely referring to writing a literacy test and receiving results based on a performance] because like a lot of people think they know English and how to read and write, and if you do a test, you'd be able to know that you are not good at this but you are good at this. So, it's better to know that. So, I think it's very good to do the literacy test.

Sabrin explained how, through what seems to be an increased emphasis on literacy skills, she became more aware of her ‘weaknesses’ and also her ‘strengths.’ It was not clear what learning

Sabrin attributed to her class and/or test preparation experiences compared to what she might learn from test results. On the graffiti walls handout, Sabrin also wrote that “it is important to have a lot of feed back from the teacher to know your faults and things you are good at.”

Anne also noted needing to improve her spelling, and Cadi said that spelling, writing neatly, and reading into texts are important skills that seemed to stick with her after she wrote the literacy test. Anne received a successful result for her performance on the literacy test, and her first reaction was to say that her results did “not really” have an impact on her. Upon further reflection, Anne added that she “should probably work better on grammar and spelling.” She said, “That’s about it.” When asked why she thought that based on the test, Anne replied, “Because my results were like . . . I passed, but it wasn’t like really good, and I know I need to work on grammar and spelling, cause that’s mainly what brought my mark down.” I followed up asking Anne, “How do you know that’s what brought your mark down?” Anne said, “Because I know I made a whole bunch of mistakes on grammar and spelling.” Anne noted that she did not receive any specific feedback based on her test performance. Thus, she did not seem to be considering any of the feedback she might have received on her Individual Student Report that would have been issued by EQAO. It is possible that Anne’s use of conventions might have negatively impacted her test score, but it is also possible that there were other skills that Anne did not effectively demonstrate. Anne’s experience with the literacy test prompted her to focus on specific literacy skills, but it was not clear whether or not those are actually the skills that would benefit her most. Finn had not yet received his test results, and when I asked Finn, “If you for some reason don’t pass the test, what do you think that will tell you?,” he replied, “Do better next time.” Finn said receiving an unsuccessful result would not have any impact on him. His understanding was that “You just have to practice.”

Some of the participants suggested that their experiences with the literacy test made them become disinterested in working on their literacy skill development. Oliver indicated that he is aware that he struggles with spelling, but he did not seem to feel that spelling was something he could improve enough. Oliver felt that he would need quite a bit of help before he would be able to learn how to correctly apply particular conventions. After having failed the literacy test twice, he was not motivated to want to continue trying to improve his skills though. Bert successfully completed the literacy test, but she noted that the culture surrounding the testing experience, and having to do something she did not want to do, made her dislike certain literacy tasks. Bert

explained, “[I]t just makes you hate it more and not want to do it, because it is excessive and unnecessary, and it’s just like, why?” Bert said that the test “kind of makes you, well, like be annoyed, because you have to write an extra essay and an extra newspaper article for no apparent reason.” She said, “So, it’s kind of like, ‘I don’t like this. I don’t want to do this. I don’t want to be a part of this.’” The testing context and conditions did not support, according to Bert, a love for literacies, but rather they ‘annoy’ students and they cause some students to ‘hate’ literacies.

Perceived Influence on Learning Environments and Learning Experiences. The participants expressed a range of thoughts on how they felt the OSSLT was potentially influencing their learning environments and their learning experiences. I have organized the findings based on the ways in which the participants perceived the literacy test to have (a) little influence, (b) a negative influence, and (c) a positive influence.

Perceived little influence. In a few cases, the participants identified how explicit test preparation affected their English courses; however, the participants reported that most of their teachers did not perceive there to be a need to incorporate explicit test preparation into their courses. Overall, the participants seemed to feel that the literacy test had little influence on their educational experiences. Oliver mentioned that although the literacy test was sometimes mentioned in his courses, the class was often “in the middle of another project or something” when the topic of the test came up. Although the teacher might have highlighted that the students needed to know how to write a particular type of text, Oliver said they never actually practiced what was mentioned in the class. He said, “we didn’t take time out of class to learn about it.” Sabrin said the teachers for most of her courses “were just like, ‘Good luck.’ And like just, I’m not sure, ‘Be patient’ and stuff.” As Cadi said, “They mostly don’t care, to be honest.” She added, “It’s pointless to them really, it has nothing to do with them. They’re just like well if you fail there’s nothing we can do really, so.” The participants did not focus on the interdisciplinarity of the literacy skills being assessed through the literacy test. The participants seemed to align the literacy test items (e.g., reading text selections, answering questions, writing a news report, writing an opinion piece) with the work that was primarily done in their English courses.

Perceived negative influence. A few of the participants explained that test preparation had a negative influence on their learning environment and their learning experiences. For the most part, the participants indicated that they did not lose much in-class instruction time for test preparation; however, Bert noted that in her Grade 10 English course, they spent quite a bit of

time reviewing work they had learned in Grade 9 to make sure students would be ready for the test. In other cases, the participants noted that, on one day, they missed classes when a mock literacy test was administered. Since they did not receive any feedback about their test performances, the participants did not see much value in these mock tests. The participants recognized that this test preparation replaced their typical in-class instruction though. For Porsche, school time that was typically devoted to independent reading was replaced by explicit test preparation on a few occasions. She also did not find that test preparation to be beneficial.

Beyond test preparation, Oliver explained that as a result of having to take the literacy course, he had to change his course selection for his Grade 12 year. Oliver stated, “It changed my courses. So, I had . . . I still got my main course that I wanted but the other two, out of the three, I had to switch.” Although Oliver was quite positive about how his learning experiences were turning out, he was still disappointed that he did not get to take the courses he was hoping to take in his final year of high school. Oliver reflected on how the skills that are being valued through both the curriculum and the literacy test are influencing how students are tailoring their education specifically in terms of potential careers. Oliver seemed to believe that the curriculum promotes particular forms of engagement and the literacy test judges whether or not students have been able to demonstrate these forms of engagement effectively enough. Oliver explained:

Like some things we are told we can never be when we’re a kid. When people ask us, what do you want to be, some people say, “I want to be a book writer,” “I want to be a journalist,” and it’s the random kid that’s like, “I want to be a professional wrestler.” Well, those kids are shot down, told what they can do, and told to pick up something else. But when they go to pick up something else, they are taught this thing, the thing that they were told they can’t do, which is . . . kind of confusing. You need to look at it from those kids’ perspective.

Oliver’s criticism seemed to be that some students are struggling to meet the expectations set for them, but they are also not being given opportunities to develop other skills that might better align with their interests and their goals.

Perceived positive influence. Donna mentioned that one of the ways that having to write the literacy test impacted her English course positively was that “it kind of makes English class a lot easier,” she explained. When asked, “Why is that?,” Donna said, “Cause now you know how to write a like . . . you know how to write an essay and stuff.” Sabrin also seemed to feel as though the increased emphasis on developing literacy skills was helping her improve her English language skills as a newcomer to Canada who was working hard to learn how to read and write

in English. Cadi noted that the literacy test helped her learn which skills are valued most, and how she should be engaging with literacy, if she wants to succeed.

Learning From the OSSLT. Most of the participants did not identify what they might have gained from having a literacy graduation requirement and from having to successfully complete the literacy test or an equivalent. During the words in a bag activity, most of the participants suggested that they did not learn anything from the OSSLT, and the test was often ranked as one of the least significant literacy influences. When asked if she learned anything from writing the literacy test, Ella said, “I did [. . .] I learned the meaning of environment. That’s what I remember.” Porsche’s response though was “I don’t know. I don’t remember.” Commenting on the literacy course, Oliver even said, “I don’t think it really did anything.” The absence of what the participants were learning about the development of their literacy skills is concerning given that this testing practice is intended to hold students accountable for their literacy education, so presumably, at the very least, they should be becoming aware of what literacy education in Ontario entails and why the few identified skills are so important for them. A few of the participants, including Cadi and Sabrin, did indicate that they felt having the literacy test was increasing the amount of awareness students had about the importance of literacy skills. Sabrin suggested that she received a lot of support to help her develop her English skills so that she would be ready to write the literacy test.

Although the participants may not have perceived, explicitly identified, and/or reported what they were learning about literacies from the high-stakes testing program, many of the participants’ comments suggest that the literacy test might have been having a greater influence on participants’ understandings and experiences than they might have realized. For instance, the ways in which some of the participants were using their test results to validate their literate identities, the ways in which the participants were, in some cases, modifying how they were engaging with literacies in order to achieve success through the test, and the ways in which some of the participants were focusing their literacy education based on the few skills they thought were being evaluated through the test, all indicate that the participants were learning something from the testing program and they seemed to be acting based on what they were learning as well. The results presented in this chapter are synthesized into a discussion about the literacy test’s potential influence in the next chapter in order to respond to the second central research question.

CHAPTER 9. DISCUSSION OF THE FINDINGS

In this chapter, I address what can be learned from the findings of this study presented in the previous chapters. Throughout this chapter, I present what I have learned by reading over, across, and between the many sub-questions. My objective for this chapter is to demonstrate how it is possible to move recursively between the sub-questions and the central research questions. The analytical work that corresponds with the sub-questions can be used to construct responses to the central research questions. The findings that align with the central research questions shaping this study are presented in this chapter thematically.

Addressing the First Research Question

The first central research question is “What are students learning about critical literacies in an educational context that includes the OSSLT?” The participants in this study did not present a concept of critical literacies as a particular understanding of literacy engagement. All of the participants were unfamiliar with the term *critical literacies*, even though the Ontario curriculum highly values critical literacy skills. This limitation is especially concerning given that the proposed theoretical construct positions critical literacies as the overarching lens for understanding what literacy entails. Metacognitive skills and metacognitive awareness are being privileged as important skills for students to be developing and using in their daily lives, and this study is designed around a framework that sees value in the ability to articulate, to express, and to represent understandings and experiences. It is possible the lack of a cohesive literacy curriculum for Ontario education, as presented in Chapter 4, is reflected in students’ abilities to reflect on the literacy skills they are developing and on how critical literacies in particular are an important part of their literacy education. The participants, nevertheless, demonstrated that they too saw value in being able to critique their educational experiences in terms of what was being valued through the OSSLT and what this testing practice means to them. In the sections that follow, I discuss (a) how the participants demonstrated having limited language to reflexively investigate critical literacies, (b) how the participants were potentially experiencing critical literacies despite not using the language of critical literacies presented in either the curriculum or the proposed literacy construct for this study, and (c) the potential implications of the participants’ lack of metacognitive awareness of critical literacies. I also consider (d) how the literacy test potentially factors into the participants’ educational contexts.

Limited Language to Reflexively Investigate Critical Literacies. The term *critical literacies* was absent from the data collection process with the exception of when I explicitly asked the participants about this term. Based on the findings, the participants did not demonstrate evidence that they were developing a comprehensive vocabulary or the language to speak about critical literacies as a way of thinking about literacy. The Ontario English curriculum (OMOE, 2007) states that students are expected to “become reflective, critical, and independent learners” (p. 5). Metacognitively reflecting on literacies requires knowledge of a theoretical construct of literacy though. As proposed in Chapter 4, critical literacies can be prominently placed in relation to what any and all forms of literacy engagement can entail; therefore, this discussion is focused on what students are learning about critical literacies.

In Chapter 4, I addressed what the expected literacy construct for Ontario education entails. I also outlined the many ways in which literacies are introduced throughout the Ontario curriculum, and I listed what is expected of all students writing the OSSLT. The following are just a few examples of the actions that are associated with the conceptualization of critical literacies that is presented across the Ontario curriculum: Identifying biases is part of the Science curriculum (OMOE, 2008, p. 38), ‘decoding’ works of art and “learn[ing] about media techniques” are part of the Arts curriculum (OMOE, 2009, p. 41), “learn[ing] about media techniques” is also part of the Arts curriculum (OMOE, 2009, p. 41), “synthesizing information” (OMOE, 2013b, p. 3) and “be[ing] aware of points of view” and contexts (OMOE, 2013b, p. 53) are part of the Geography curriculum, “asking questions” is part of the English curriculum (OMOE, 2007, p. 34), “determining the intended audience of a text” is part of the History curriculum (OMOE, 2013, p. 37), and working with “a variety of sources on a common issue” is part of the Science curriculum (OMOE, 2008, p. 38). Students are expected to be able to demonstrate proficiency with these facets of the construct by the end of Grade 9. The participants’ conceptualizations of the term *literacy*, as captured throughout the research activities, are reflective of the language the participants seemed to be most familiar with. The language used by the participants was limited in contrast to the range of skills that students are expected to be able to demonstrate and to be able to metacognitively reflect upon. Much of the potential literacy curriculum was not reflected in how the participants spoke about or otherwise represented their literacy education.

Throughout many of the participants' developing conceptualizations of literacies there were references to reading and writing in some capacity, and almost all of the participants mentioned communication and/or comprehension as overarching concepts that reflect what literacy is all about. The participants also focused on how literacies are related to language. Although all of the participants referred to reading and writing at different points throughout the study, the participants did not elaborate very much with regards to what reading and/or writing entail when they were reflecting on how they were working to develop their literacy skills. Many of the participants mentioned working on grammar and spelling in particular when reflecting on their writing skills. The participants who had experience as language learners also acknowledged an awareness of their pronunciations or accents and their interest in developing a larger vocabulary. There is a lot more involved in reading and writing processes that were not addressed by the participants. When sharing experiences that they associated with literacy, many of the participants commented on reading books, writing essays or news articles, and/or practicing speaking or having discussions in class, but there was very little elaboration about what strategies one might use while reading a particularly challenging text, what it means to write an essay, or what decisions might be involved when constructing a news report or participating in a discussion or even a debate. There are many rhetorical processes, genre and design choices, communicative and representational decisions, and a great deal of problem solving and creative, as well as technical, processes involved in literacy engagement, even when the focus is strictly on reading a book or writing an essay.

Because multiple opportunities were available to the participants to communicate in ways that were not only or necessarily word-based, the participants were able to move beyond verbal language processing to make sense of what literacy entails in different ways. The use of multiple modes and multiple mediums made it possible for the participants to share their understandings and experiences in a number of different ways, despite perhaps lacking the linguistic abilities to talk about literacies in more conceptually complex ways. Even with access to diverse representational modes though, there were gaps in terms of how the participants were conceptualizing literacies.

Experiencing Critical Literacies Without the Language of Critical Literacies. The participants demonstrated throughout the study that they were able to apply many of the core skills I associate with critical literacies, including questioning, critically analyzing, critically

responding, and acting and reflecting. Although the participants did not present evidence that they were learning about the language of critical literacies explicitly, they were developing and using many of the skills I associate with this overarching conceptualization of literacies throughout their engagements with this study. Throughout their engagements with the research activities, the participants demonstrated what it means to question, to analyze texts, to critically respond, and what it means to act and to reflect. Arguably every contribution the participants made to this study could be analyzed as being demonstrative of questioning, analyzing, responding, and acting and reflecting at least to some extent, since the participants were processing the questions, considering the research context, responding by sharing their understandings and experiences, and also reflecting on their understandings and experiences of literacies and the literacy test's potential influence on their literacy education, their understandings, and their experiences.

In a few cases, the participants also highlighted moments where they were experiencing questioning, analyzing, or critically responding as part of their classroom or extracurricular experiences. The participants did not typically make an explicit connection between these practices or processes and what literacies means though. Based on the experiences the participants discussed, and how they spoke about their school experiences in particular, it seemed as though much of the critical consciousness and engagement that the participants demonstrated in the context of this study did not necessarily come from the classroom, or from their experiences with the OSSLT, apart from a few exceptions. For some of the participants, community involvement and/or familial dynamics and relationships seemed to provide considerable learning opportunities outside of the school context. The participants demonstrated that students can enrich their literacy education by seeking diverse opportunities to develop and to practice their skills. Even though the literacy test only privileges a few select reading and writing skills, some of the participants seemed to see value in supplementing their education and their literacy repertoire with other skills, but these participants seemed to have to do so outside of the school context. It is important to recognize that "literacy is a social, cultural, and political experience" (Kendrick & McKay, 2009, p. 67), and it entails much more than just formulaic responses to texts or scripted responses.

Lacking Metacognitive Awareness of Critical Literacies. Because the participants seemed to lack the language to talk about critical literacies, they also seemed to lack the metacognitive

awareness of the critical literacy skills they might have. According to E. Meyer, Abrami, Wade, Aslan, and Deault (2010), “Metacognition refers to the awareness, knowledge and control of cognition” (p. 85). Swinehart (2009) suggests that when students are able to “gauge [their] own understanding” (p. 30), they will be better equipped to learn though. Since learning about literacies, and critical literacies in particular, focuses on learning skills and learning how those skills can be used and adapted in different contexts, metacognitive awareness of skills is essential to literacy education. Numerous scholars associate metacognition with self-regulated learning (E. Meyer et al., 2010) and see value in developing metacognitive skills for literacy education (see Linda Baker & Beall, 2009; Israel, 2007; Schreiber, 2005). Griffith and Ruan (2005) suggest that metacognitive skills are particularly helpful for critical literacy engagement because of “the unique emphasis that critical literacy places on questioning and evaluating texts for potential biases and inequality” (p. 11). Engaging with critical literacies requires an awareness of the ideas presented by others as well as one’s own thinking in relation to those ideas. Metacognitive and/or reflective skills are included in the French as a Second Language program (OMOE, 2014b), the Arts program (OMOE, 2009), and the English program (OMOE, 2007) as part of a discussion of literacy education. Swinehart (2009) notes the significance of students, and English Language Learners in particular, being able to consciously navigate their thought processes with an awareness of what strategies they are using in order to consider how they could potentially improve their use of those strategies and also consciously practice using other strategies. The fact that the participants were not familiar with a concept of critical literacies, and that the participants did not emphasize reflection as an important part of their literacy education, was concerning.

When the participants identified literacy skills they felt they needed to improve, they often referred to the particular skills that are explicitly aligned with the literacy test. Reading and writing were often mentioned, and a few of the participants could specify what these skills might entail, but there were not many references to skills that are not valued on the literacy test. For instance, many of the participants spoke about needing to improve their spelling and grammar skills, which, for the OSSLT, is part of students’ use of conventions. This is one of the main three writing skills being measured on the literacy test. These findings suggest that the literacy test could be having some influence over what the participants are learning about the importance of developing particular literacy skills. It is possible the testing practice’s focus on specific

literacy skills was influencing how the participants were directing their literacy education to better align with the skills that are valued on the test.

There were a few exceptions where participants mentioned wanting to improve a skill other than those being evaluated through the literacy test. For instance, one participant mentioned wanting to improve using her literacy skills in French, and another participant spoke about working hard to improve her spoken English. When the participants spoke about the literacy skills they might want to improve, it was not always clear what the participants understood to be a skill though. The participants did not explicitly express how reading and writing could be conceived as skill sets comprised of multiple skills either. Thus, even though the OSSLT is measuring these skills, and most of the participants were able to successfully demonstrate the skills being measured, they were not necessarily able to articulate a clear, concise, or comprehensive understanding of what literacy entails whether it be for the test, for the curriculum, or for engagements that extend beyond a school-based context.

Metacognitive skills can help students develop and refine their conceptual understandings of what it means to be developing literacy skills and how they could be improving their literacy skills. To be able to engage and further develop metacognitive awareness though, the participants would need to work on developing an important part of their reflective toolkits, which is a language that they could use to make sense of and assess their proficiencies with respect to particular skills and/or domains of knowledge. The importance of developing literacy skills is the foundation of the literacy test; however, based on the reported experiences of the participants in this study, the participants did not appear to be learning or developing the skills needed to help them become aware of what the term *literacies* might mean, including which skills and processes are associated with literacies for Ontario education, or how students can possibly go about developing their understandings of literacies and improving their proficiency with literacies.

Factoring the OSSLT Into the Educational Context. The OSSLT is an authoritative and potentially influential source when it comes to students' literacy education in Ontario. This testing practice has the power to potentially shape the language of literacy that students use to conceptualize literacy and to describe their literacy experiences. The ways in which the participants in this study spoke about literacy reflected the limitations of the language used in the testing context. Despite being able to identify how they experienced literacies outside of the school context, the participants did not seem to be developing a language of literacies outside of

the school context. In the school context, the literacy test is clearly identified as being a measurement of literacy skills, which in effect defines and demonstrates to students what engaging with literacy looks like at least to some extent. The participants were also aligning their understandings with the reading and writing skills that are valued on the test. The OSSLT's focus on reading and writing skills happened to be the way in which almost all of the participants defined literacies at least initially. References to reading and writing almost always seemed to be what the participants first mentioned when they were asked about literacy. When I combined all of the participants' word-based contributions, I was able to create a fairly complex literacy construct; however, at the center of the construct, was the binary of reading and writing, representing the overarching organizational structure of how the participants were expressing what literacy entails. I find it interesting that this is not how literacy is presented across the curriculum. It is how literacy is presented in relation to the graduation literacy requirement and the literacy test though. Based on the findings presented in the previous chapters, the OSSLT seemed to have had a significant influence, whether the participants were consciously aware of the influence or not, on how the participants were learning about and conceptualizing literacies. When the participants spoke about the literacy test, most of the participants did not suggest, nor did they seem to recognize, how the OSSLT might have influenced their understandings of literacy. A more detailed discussion of the participants' perceptions of the influence of the literacy test is presented in response to the second research question.

The OSSLT was not the only factor influencing how the participants were learning about and conceptualizing literacies though. Throughout this study, the participants noted what they felt they had learned about literacies from particular individuals, from resources, and/or from their experiences. When the participants were asked about literacies across multiple different research activities, and when they were given different opportunities to reflect on multiple aspects of their educational experiences, they often expanded their conceptualization of literacy as reading and writing. In some cases, the participants also began introducing the concept of oral communication. Almost all of the participants referred to communicating and comprehending more broadly as being significant parts of literacy. This conceptualization was reflected in the collective construct presented in Chapter 7 (see Figure 36).

In terms of how the literacy test might have factored into the participants' educational contexts, the participants spoke about how explicit test preparation was integrated into their

English courses, and, for some of the participants, school-wide initiatives, including writing a mock or practice test or a workshop, took place during class time. Quite a few of the participants noted that at least some class time was devoted to preparing for the literacy test. The participants did not suggest that their literacy education was being negatively impacted by the test preparation, but at least one participant wondered what the point was in doing something once and not returning to it again later.

Many of the participants demonstrated that they were unclear of the purpose of the particular tasks that are included on the literacy test. Most of the participants seemed unable to identify which particular skills were being assessed through the literacy test items, why those skills were important for the specific tasks at hand, or how those skills could apply to other tasks. When talking about literacy skills more generally, the participants seemed to have an easier time understanding why they might need literacy skills for a variety of reasons, including literacy being needed for daily communication, for staying informed about the world, and for remaining safe and for avoiding identified dangers in the environment. The participants' comments about not seeing value in the particular tasks that students were required to complete on the literacy test suggest perhaps that the participants were not sure how to factor the literacy test seamlessly into their educational contexts as a relevant practice or even as an opportunity to demonstrate particular highly valued skills. If students do not understand how to use or transfer the knowledge and the skills they are learning and being evaluated on to other contexts, it is likely these skills will hold little value beyond the specific contexts in which these skills are being learned and measured. Slomp (2012) suggests that knowledge transfer is a complex process and one that, drawing on Bronfenbrenner's (1999) theory of development, works best when contextual factors, including personal, social, cultural, and other environmental factors, are considered as part of the process of transferring knowledge across contexts. Rather than seeing knowledge transfer as an explicit transfer of something that remains "static" (Slomp, 2012, p. 82), literacy skills can be understood to be reformulated to suit the needs and purposes of particular tasks and particular contexts (see Wardle, 2007). If students are learning how to read, to write, to view, and to respond in formulaic ways, it is possible they are not developing a repertoire of knowledges and skills that they could continue to use when engaging with literacies in a myriad of other contexts.

The literacy test is used to evaluate a student's ability to engage with literacies in a very specific context. The application or transfer of diverse knowledges and skills to multiple contexts is not part of the OSSLT testing experience. Given that the format of the test is so standardized from year to year, and that it can be anticipated by test takers, the application of knowledge and skills in a potentially unique context is not what is being assessed. EQAO releases sample tests annually, which facilitates the process of potentially anticipating the precise testing context. There is no evidence provided through the testing practice that a student who successfully completes the OSSLT is likely able to complete any other literacy tasks. For example, for one of the test items, a student's ability to produce a two-page opinion piece given a short prompt is evaluated. The criteria upon which responses are assessed seek responses that are (a) related to the prompt, that (b) express an opinion that is supported, and that (c) demonstrate organization of thought (EQAO, 2014f, Scoring Guide for Long Writing Topic Development: Section I; see also EQAO, 2008a, p. 29). There is no data being collected to support any inference that students would be able to demonstrate the skills being measured in other contexts, such as if they were asked to write a book review or if they were asked to review and comment on a proposal. These two other writing tasks are similar to the test item in that the criteria used to evaluate students' performance on the opinion piece are also relevant to these tasks; however, there are distinct differences between each of these three genres of texts and how a writer might engage with literacies to go about composing these three different texts. It is not known if the unfamiliarity of an alternative text or genre of writing would overwhelm a student who might be trained to specifically write an opinion piece based on a provided topic without any research or any engagement with a diversity of texts and/or resources. It might be helpful to know if students could discern what in particular makes a strong opinion piece, a strong book review, or a strong review and response to a proposal. It might also be helpful to know whether or not students would be able to independently conduct research into alternative genres of texts to continue developing their genre-specific knowledge (Bean, 2008) and whether or not they would be able to adapt particular writing skills to a different writing task.

The design of the OSSLT does not provide students with an understanding of how reading and writing skills might relate to their everyday lives, nor does it require them to make these connections. Instead, the participants in this study seemed focused on the very specific contexts in which writing and reading seem to be situated on the test. The participants did not seem to

have experience ‘decontextualizing’ (Rosenblatt, 1982, p. 271) literacy skills from the specific contexts in which they are often presented. The participants seemed to have trouble discerning what value there was in writing a news report or writing an opinion piece on a topic they were not invested or interested in. The participants were not considering literacies beyond the specifically provided contexts. The focus of the literacy test is on essential reading and writing skills that students will need for many different purposes throughout their lives though. The literacy test does not seem to be effectively enriching the participants’ literacy education or the participants’ literacy experiences in terms of encouraging them to recognize how they can expand their understandings and their use of their literacy skills.

Addressing the Second Research Question

The second research question is “How do students perceive the OSSLT to be contributing to, and/or hindering, their development of critical literacy skills?” Reflecting on the influence of a testing practice means understanding not only the construct being measured but also understanding the tool being used to measure performances. It is particularly difficult for students to assess how something might be influencing their literacy education, or even attempt to work on developing and improving their own literacy skills, if they are not certain what literacy as a concept entails or how their literacy skills are being assessed and evaluated. The participants in this study demonstrated that while they were still trying to make sense of what literacy entails, and while they were unsure how their literacy skills were being measured through the literacy test, they had given quite a bit of thought to how they performed on the literacy test, and they had considered what their test results might mean. Through an analysis of the artefacts the participants contributed to this study, I learned about the participants’ knowledge of the literacy testing practice, what the participants believed was the purpose of the test, how the participants reported experiencing test preparation, the participants’ experiences writing the test, the participants’ reflections on the test’s format and content, as well as learning about which skills the participants believed the literacy test was assessing. I also learned how the participants were valuing the literacy testing practice. Using this frame of reference about how the participants understood and valued the testing practice, I analyzed the participants’ contributions concerning the potential influence of the literacy test.

Almost all of the participants ranked the OSSLT as being the least, or next to least, influential source in terms of their literacy understandings and experiences (see Table 21 and Table 22

presented in Chapter 7). The participants reported not learning very much through the testing practice, which seemed to be why most of the participants ranked the OSSLT as not being a significant influence on their literacy education. There were two exceptions where participants ranked the OSSLT as their second most significant literacy influence though. Donna positioned the OSSLT highly because of its explicit focus on literacy, and Sabrin indicated that she felt the literacy test played a significant role in terms of her experiences learning English. Given the high-stakes roles that assessment and evaluation play in the Ontario education context, it was concerning that the participants in this study did not demonstrate a more comprehensive understanding of assessment tools and how they could work with these practices and the data that are constructed through these practices to enhance their learning experiences.

Even though the participants did not report learning very much from the OSSLT, their comments about their experiences with the literacy test revealed that there were many ways in which this testing practice was potentially influencing the participants' thinking about their literacy skills, their literacy experiences in their courses, and also, as previously noted, their understandings of what literacy entails. The participants were invited to consider through a diverse array of possible research activities: (a) how they received and interpreted their test results; (b) the degree to which they felt their test results were an accurate representation of their literacy skills; and (c) how they perceived the OSSLT to have influenced their self-image, their courses, their future plans, their relationships with literacies, and their classroom environments and their in-class learning. The participants were quite critical of particular aspects of the literacy testing program.

In the sections that follow, I discuss how the participants perceived the testing program to be potentially influencing their literacy education. In particular, I discuss the participants' contributions regarding: (a) how their literate identities were being challenged, (b) their changed relationships with literacies, and (c) their changed learning trajectories. These were the themes that resonated with me as being worthy of critical consideration. In addition to discussing these three themes, which focus on what the participants reported, I also discuss how the limited focus of the OSSLT might have been (a) limiting the participants' conceptual understandings of literacies, (b) limiting what the participants focused on with respect to literacy skill improvement, and (c) limiting the participants' engagements with literacies. While the first three points of discussion are reflective of what the participants shared with regards to how they

perceived the literacy test to have influenced their literacy education, the last three discussion points are the product of analyzing the omissions and the gaps in what the participants focused on and how the literacy test might be having a broader influence on how students are coming to understand, as well as reflect on and evaluate, their literacy education.

Challenged Literate Identities. When talking about test scores, the participants often equated their test scores with their identity as being literate individuals. The OSSLT focuses on a few select reading and writing skills, and these were often the basis upon which the participants were determining whether or not they perceived themselves to be literate. The participants did not often consider that their ability to reflect on their skills was part of what it means to be literate, nor did necessarily being able to critically respond to a text factor into the baseline they had established for what being literate needs to entail. In some cases, the participants noted that the literacy test alone was not the only way through which they could know that they were literate.

Almost all of the participants indicated that they expected to pass the literacy test. Many of the participants recognized that they needed to work on improving their spelling and grammar skills, and a few of the participants noted that they find responding to multiple choice questions challenging, but the participants still felt as though their performances would merit receiving a result that would indicate that they were sufficiently literate.

Quite a few of the participants who received successful test results hypothesized how they thought they would feel if they received an unsuccessful result, which included speculations of feeling upset, embarrassed, or ashamed. These reflections suggest that receiving results for the literacy test was potentially an emotional experience for the participants whether or not they received results that aligned with their expectations. Many of the participants seemed to have had an established identity with respect to the kind of achiever they were in school. They also seemed to hold particular expectations for themselves when it came to receiving marks, which extended to receiving their test results. For many of the participants, it seemed as though receiving a result that was counter to their expectations would prompt, and in some cases did prompt, the participants to question the testing practice. One participant suggested that the way in which his work was being evaluated on the test had to be different from the ways in which his coursework over the years was being evaluated. The two participants who received unsuccessful test results seemed to fail to recognize though that the few particular skills being evaluated

through the test consisted of only a minor subset of the expectations from their English courses. Their results in relation to the broader coverage and the full representation of the curriculum in the course context could differ in comparison to their test results, and their test results might have highlighted a few specific skills that they might struggle with in a texting context in particular.

Most of the participants did not seem to see value in having an independent evaluation of their skills be conducted. One participant though did seem to appreciate receiving validation from an external source, especially because she received a higher score than one of her peers who often received a higher mark in their English courses. A culture of competitiveness seemed to surround receiving the results of evaluations at least for this participant. The participant's comments perhaps suggest that different evaluators and different evaluation practices might have different biases; however, it is possible the issue is just that different constructs were being measured in either case. In either case, EQAO claims that their "provincial assessments remove all subjectivity from evaluating" students' achievement (EQAO, 2014e, Why are EQAO assessment results important? section). EQAO claims that their data are "objective" (EQAO, 2015g, para. 1; see also Rodrigues, 2014, p. 2). Standardization does not necessarily limit bias though (see Slomp, 2016a, The Scoring Inference section, para. 3). All evaluations are subjective. There are particular choices and decisions made, and many of these decisions are value-based. Decisions are made about what will be assessed, how, why, and for what purposes, as well as how the results of an evaluation will be reported and how they will be contextualized in particular ways to make meaning. For the OSSLT, it would be more appropriate perhaps to claim that personal bias is replaced with a standardized bias.

Changed Relationships With Literacies. The participants' relationships with literacies seemed to have been altered based on their experiences with the literacy testing program. While at least one participant seemed to appreciate the intense focus on ensuring that she was developing her language skills as a newcomer to Canada, other participants seemed to lose interest in particular forms of engagement because of the stress that surrounded the testing program. Some of the participants expressed that just having to write a high-stakes standardized test was influencing how they felt about literacies. The literacy graduation requirement seemed to stand as a curricular "hoop" (Lloyd, 2010, p. 19) that at least some of the participants seemed to think they just had to get through. One participant suggested that having to repeatedly engage

with the same types of literacy tasks over and over again made her “grow a hatred” towards those particular literacy tasks. This participant presented herself as an otherwise avid independent reader, writer, singer, and performer. A few of the participants also highlighted how they were engaging with literacies in the ways that they thought would earn them high test scores, even if they did not necessarily agree with or believe the thoughts they were writing. The participants seemed to be practicing scripted literacies. Students were selecting the responses and writing texts in ways that they believed they needed to based on what they thought would be accepted. It seems as though there is a particular formula that students are expected to be able to apply when writing their responses on the OSSLT. One participant used the resources made available through EQAO to learn how to write an essay, so that she was ready to write the literacy test, and another participant’s language learning experiences seemed to include a considerable amount of test preparation, suggesting that the ways in which she was learning how to use the English language were at least in part informed based on the expectations and practices that are valued on the OSSLT. The texts that the participants were producing seemed to be perceived by some of the participants as having little value other than being used to determine if they have particular literacy skills.

EQAO has defined a very particular type of literacy relationship, yet there are so many other ways in which students can go about engaging with literacies. According to the OSSLT’s criteria, there is one best way to read and one best way to write the particular texts that are provided, and demonstrations of these ways of reading and writing have particular characteristics or traits. Quite a few of the participants suggested that there are other ways through which they could be demonstrating their skills, and multiple choice questions in particular did not seem to be the preferred mode through which the participants felt their reading comprehension could be measured. Some of the participants also expressed not understanding the value in having to specifically write a news report and an essay-style opinion piece.

When prompted to reflect on how the test could be otherwise, the participants suggested including different text types on the literacy test, they suggested reducing the number of test items, and some of the participants suggested removing entire sections of the test. The participants did not propose alternative assessments that radically diverted from the structure or concept of a standardized test though, and they did not present any ideas of alternative

assessments that would make use of multiple modes or that would permit them to engage and demonstrate their skills in a variety of ways.

Changed Learning Trajectories. One participant in particular had to change his course schedule for his final year of high school in Grade 12 in order to accommodate having to take the literacy course. This resulted in this participant having to change all but one of the courses he was hoping to take in Grade 12. Luckily, this participant seemed to be quite adaptable, and he seemed to have made the most out of the situation. He did not consider, nor did he suggest, that his literacy education in particular was altered by having to take certain courses instead of other courses. He also did not suggest that the skills he was developing in the new courses he had to take were of any greater or lesser value than what he might have learned in the other courses. This participant arguably lost out on the opportunity to engage with a diversity of literacies though, since the objectives of the literacy course align with the literacy test, which means the course only privileges a few very particular literacy skills rather than the large range of literacy skills that are otherwise represented across the Ontario curriculum. Moreover, although the participant's altered learning trajectory could have potentially created opportunities to enhance his literacy education, he reported that he did not think much changed with regards to why he was unsuccessful on the test in the end. This participant did not report any significant positive experiences in terms of any targeted instruction or additional support and guidance.

Limiting Conceptual Understandings of Literacies. Although the participants did not perceive their understandings of literacies to be limited, I would argue that when compared with the expected construct of the Ontario curriculum, the participants' conceptualizations of literacies were rather limited, both in terms of their word-based articulations and their expressions and representations of literacies through other modes. One participant even defined literacy specifically in relation to the literacy test. The OSSLT was designed in response to a demand for students to be accountable for their literacy education; however, the students participating in this study demonstrated that they were still trying to figure out what literacy as a concept entails even after having completed the test. The literacy graduation requirement has the potential to serve as an opportunity to emphasize the objectives of literacy education in Ontario. Only a few skills are being highlighted through this program currently though. Developing a comprehensive understanding of literacy could have been a positive outcome of the literacy testing practice, but the literacy requirement and the testing program do not seem to be clarifying

for students what literacy is all about as represented in the Ontario curriculum. The participants collectively identified reading and writing, and they seemed to recognize the importance of understanding the texts they read and the importance of communicating clearly using conventions as expected. This conceptualization of literacy aligns generally with the skills that are valued through the OSSLT. When ranking literacy influences though, most of the participants did not suggest that they were learning anything significant from their experiences with the OSSLT. That the participants referred to other skills, including oral communication, suggests that the OSSLT was not the only influence that shaped the participants' understandings of literacies. Putting their other developing understandings of what literacy might entail into words proved more challenging in most cases though. The participants did not seem to have the words to speak about literacies in a diversity of ways. Even when representing literacies through other modes, the language of literacy that the participants were familiar with (i.e., that literacy is primarily based upon reading and writing) seemed to influence what they were focusing on. The participants all seemed to understand that they need literacy skills though, which might be in part due to the increased focus on literacy brought about with the literacy graduation requirement and the literacy test.

Limiting Understandings of Literacy Skills Development. Improving one's literacy skills should be a familiar concept and practice for Ontario students. The OSSLT is specifically first administered to students typically when they are in Grade 10 to give students who are unsuccessful on the test future opportunities to improve and to succeed. When prompted to reflect on their literacy skills and to consider what skills they have, which skills they struggle with and/or find more challenging to use, and which skills they would like to improve, most of the participants were able to identify one or more skills for each of these categories. Elaborating on how they self-assess or set goals for their literacy education seemed to be more challenging for the participants or at least something that they had less experience articulating though. When asked what their goals were, many of the participants indicated that receiving a particular mark for their English course was their literacy goal. For these participants, their focus appeared to be result-oriented. Rather than aspiring to improve particular skills for their personal betterment, it is possible the high-stakes literacy testing context has further emphasized that what is most important is ensuring that students satisfy a requirement or meet a standard. One participant frequently stated that developing literacy skills is important in order to be a contributing member

of society though. Thus, this participant did report seeing value in literacy that extends beyond evaluative contexts. Many of the participants indicated that they see value in the literacy skills they can relate to their daily lives. When stating their literacy goals though, the participants did not seem to reflect on their out-of-school literacy contexts. For instance, one participant noted that she has “no literacy goals,” but she seemed to be quite invested in working to improve her spoken English. Oral communication is not part of the test’s literacy construct sample though. Literacy education is something that is always ongoing, and students would likely be better served by a culture that models what it means to always be learning rather than one that is determined to set and achieve a particular fixed standard. The minimum competency model of the literacy test in Ontario is not necessarily serving students’ best interests. It was unclear, based on the contributions made by the participants, if the participants even aspired to achieve beyond the standards set for the literacy test.

Limiting Engagements With Literacies. The participants shared many comments about how they felt the format of the literacy test limited how they were able to engage with literacies on the test. In particular, a few of the participants did not like that they could not consult any resources. Quite a few of the participants mentioned not being able to ask questions or clarifying their thinking through conversation with others, which they thought was problematic. The participants’ comments indicated that they felt the literacy test did not provide them with adequate time, space, opportunities, and/or resources to be able to demonstrate their literacy skills. Some of the participants also recognized that not all skills were being assessed and that what they were being asked to do was quite limited. For a few of the participants whose first language was not English, how they were learning the English language seemed to be in some ways intertwined with preparing to write the literacy test. How these participants were learning, and the particular literacy skills they were valuing, seemed to have been limited by the scope of the test at least to some extent.

CHAPTER 10. CONCLUSION

This qualitative multi-method study examined students' perceptions of their literacy experiences in the context of the OSSLT and their perceptions of how this high-stakes literacy test could be influencing their literacy education experiences. The participants engaged with multiple arts-informed literacy activities as a way of reflecting and reporting on their educational experiences. Case studies were used to represent each individual participant as a unique and significant contributor to this study. In addition to analyzing each individual case, cross-case analysis was performed to learn from the multiple participants as a collective.

In this concluding chapter, I state the significance and the contributions of this study. I also present the implications of the research and I provide a list of recommendations that are based on the findings of this study for particular stakeholder groups, including EQAO, the Ministry of Education (OMOE), teachers, students, and education researchers. The recommendations are intended to be read as options for continued research and learning. I also present a few potential extensions of the research by stepping back from the specifics of the research questions that guided this study. After having reflected on the findings of this instance of validity research, I reconsider some of the wonderings that were presented in the introduction to this inquiry. This chapter concludes with a few final thoughts on high-stakes literacy testing and literacy education.

Significance and Contributions of the Study

This study is significant in that it critically investigates how both educational measurement and literacy education research can be used to inform an investigation into the validity of a large-scale high-stakes literacy test. Both the methodology of this study and the findings from both the construct analysis and the outcomes analysis offer original contributions to knowledge. As an original contribution to knowledge, this study demonstrates how an in-depth analysis of a test's literacy construct can be performed. This study also presents a qualitative multi-method methodology for conducting research into the outcomes of literacy education in an educational context that includes a high-stakes literacy test. The methodologies for conducting construct analysis and outcomes analysis presented in this study provide a strong foundation for conducting validity research. They also demonstrate that there is a wealth of learning that can come from working with a diversity of modalities. High quality research-informed evidence needs to be the basis for educational decision making, and this study is a model of how this work

can be performed. The findings of the outcomes analysis performed through this study (1) identify limitations with regards to students' understandings of literacy, including being unfamiliar with a concept of critical literacies; (2) demonstrate that students align their understandings of literacies with the reading and writing skills that are valued on the high-stakes literacy test while also wondering what else might count as literacy; and (3) suggest that the literacy test is potentially influencing students' literate identities, their relationships with literacies, and their learning trajectories. The OSSLT is a pioneering effort that emphasizes the importance of literacy in youth's lives; however, as a powerful and authoritative source, this testing practice is also defining literacy. Based on the findings of this study, the literacy graduation requirement and the OSSLT together seem to be influencing and potentially limiting what students are coming to know and understand to be literacy. The findings of the construct analysis framing the study illustrate though that literacy includes far more than just a select few reading and writing skills. Though arguably noble with its objective being to provide data to improve literacy education in Ontario, the OSSLT is not currently able to identify areas in which students' literacy education could be enhanced beyond a very particular construct of literacy.

Implications of the Research and Recommendations for Stakeholders

In the following section, I identify a selection of fourteen recommendations. The recommendation are informed by the findings of this research, and they are intended to demonstrate the significance and potential contributions for practice and for continued research that this qualitative inquiry offers. The recommendations are organized based on which stakeholder group could potentially develop an action plan in response to the stated implication of the research.

Recommendations for the Education Quality and Accountability Office (EQAO)

Recommendation 1: Develop a validity argument exclusively for the OSSLT. As presented in Chapter 4, EQAO has not presented a comprehensive and well-supported validity argument to justify any interpretation or use of the test results they construct. The Grades 3, 6, and 9 EQAO tests are different from the OSSLT, and a unique and distinct validity argument is needed that takes into consideration the implications of using a test with explicit high-stakes consequences for accountability purposes. A comprehensively-constructed validity argument would outline the beliefs and the assumptions that are shaping the literacy testing practices, and it would offer justifications for the test's construct sample. The validity argument for the OSSLT also needs to

acknowledge and to justify the potential consequences of this testing program such that the data produced through the testing program can be better contextualized. The findings of this study suggest that having to obtain a successful result on the literacy test influences how students engage with literacies through this testing practice. This means the data being collected through the testing practice are not necessarily a representation of students' literacy abilities, or rather how they might choose to engage, beyond the testing context. Findings from this study also suggest that it is possible students are focused specifically on being able to complete the very specific tasks on the OSSLT, while there remains no evidence of whether or not they would be able to apply or to adapt their reading and writing skills to be able to perform equally well in other contexts. Additional research is needed into the outcomes and the potential consequences of using the OSSLT as a high-stakes literacy test in regards to how literacy education in Ontario continues to take shape in relation to the literacy graduation requirement. It is surprising that significant decisions are being made for students based on a single test, especially given that EQAO understands the limitations of any particular test and the need to use multiple methods and measures to collect data on students' achievement.

Recommendation 2: Nuance assertions about the validity of the OSSLT. Statements made regarding the validity of the OSSLT need to be nuanced. Kane (2006) refers to Toulmin's model of inference (1958) to explain how qualifiers can accompany claims made to indicate, for instance, the strength of a claim or interpretation that is being made. While using qualifiers in an evaluation context might appear to threaten the quality of the evaluation, confidence in a testing tool should relate to the capacity and effectiveness of the tool, and if absolute certainty is not possible, then claims made should be nuanced as needed. When EQAO writes about measurement error, this is an opportunity to nuance interpretations of the test results and the claims being made about students' literacy skills, especially in terms of the scope of the investigation. Moreover, not everything can be known about a testing program, and there needs to be a recognition that validity research needs to be ongoing. Identifying the limitations of the testing program in these terms might be perceived to threaten confidence in using the testing program, but confidence likely needs to be destabilized when it comes to reporting and making high-stakes decisions based on one single large-scale standardized test.

Given that there are limitations to the test's construct, which impact the data produced, a more comprehensive discussion of why EQAO is measuring the six particular skills they are

measuring, and also why they are not measuring a different sample of the literacy skills that are expected of graduating students in Ontario, is needed. There are also consequences to associating high-stakes with a literacy test, but it is unclear what considerations EQAO may have factored into their validity judgements. Understanding how a high-stakes literacy test is influencing the broader educational context from which it is derived can help inform a validity judgement. Findings from this study suggest that the OSSLT is potentially influencing students' literacy education in a number of ways that merit critical consideration when making a judgement about the validity of this testing practice. This study demonstrates how by focusing on a particular aspect of literacy education in Ontario, which in the case of this study is critical literacies, it is possible to investigate the potential outcomes, including the potential influence, of using a test-based accountability program in a particular educational context.

Recommendation 3: Review and revise the literacy construct of the OSSLT. Although the OSSLT is supposed to be based on the Ontario curriculum, the test is not representative of the literacies that Ontario high school graduates are expected to learn and be able to demonstrate. Justification is needed for how the particular three reading skills and the particular three writing skills have been identified and selected for evaluation through the OSSLT. What the test measures, by extension, becomes the foundation of the literacy graduation requirement. Literacies are so much more than just the three reading skills and the three writing skills that are measured through the OSSLT. EQAO appears to have selected a few skills in a cross-curricular fashion without establishing any coherence of a test construct in relation to a broader literacy construct. The literacy skills being assessed on the OSSLT are the same skills that are assessed on the Grades 3 and 6 EQAO tests as well (see W. T. Rogers, 2013, p. 11); thus, it would be helpful to demonstrate how and why EQAO's literacy construct is what it is and why it seems to remain static across the grade levels. The OSSLT's test construct needs to align with the literacy construct that is reflected throughout the curriculum; however, EQAO does not currently integrate any evidence of a comprehensive analysis of the Ontario curriculum within their presentation of the literacy test's construct. Based on the curriculum analysis presented in Chapter 4, the test's construct needs to be revised in order to better represent what literacy education in Ontario is expected to entail.

Clarifying the design of the literacy test's construct is important since EQAO, in accordance with the Ministry of Education and the literacy graduation requirement, is defining a literacy

curriculum for Ontario. The literacy test is an attempt to illustrate the interdisciplinarity, or at the very least the cross-disciplinarity, of literacy by drawing from multiple curriculum documents to inform the test's construct. This work needs to be refined, and it needs to reflect a more conscientious understanding of what it means to work with disciplinary knowledges and skills in the context of Ontario education. The Ontario curriculum is designed based on disciplinary knowledges and skills, and although there are cross-curricular connections that can be found with regards to how literacy is being introduced in the curriculum document for each program, it is not an explicitly required component of each course to make these interdisciplinary or cross-disciplinary connections apparent as part of students' learning experiences. The potential for interdisciplinarity is not conceptually addressed across the curriculum. The ways in which literacy is introduced and woven throughout the Ontario curriculum is an example of how the potential for interdisciplinarity is not conceptually addressed across the curriculum. As presented in Chapter 4, literacies are currently highlighted in a piecemeal fashion across multiple curriculum documents, but there is no unifying interdisciplinary construct that gives shape to how literacies are intended to be learned and understood by students. Rather than define a high-stakes test-based accountability program in the absence of a literacy-specific curriculum, the literacy test should be aligned with the curriculum that exists and that has been developed and been used to inform and to guide teaching and learning in Ontario schools.

Recommendation 4: Conduct research on knowledge and skill transfer. The Ministry of Education and EQAO both state that the skills being emphasized by the literacy graduation requirement and the OSSLT are the basic or the core skills needed to succeed in future studies and life. The objective of the accountability system is to ensure that by the time students graduate from high school, they will be able to demonstrate that they have received a high quality literacy education as represented by students' ability to meet the requirements of the OSSLT. What appears to be unsaid, and not thoroughly supported in the documentation justifying the literacy graduation requirement or the OSSLT, is that there is some expectation that students will retain what they have learned and that they will be able to continue demonstrating the particular literacy proficiencies that are measured through the test in other contexts. To use test results in this way is to make a generalizability inference (see Kane, 2013a) that suggests that performance in one context will be comparable and representative of performances in other contexts. It is unclear how the literacy test can be effectively used as an

indicator that students who are able to perform in the particular context of a high-stakes standardized literacy test are sufficiently prepared for future studies and life more generally. Research is needed on knowledge and skill transfer to understand if what students are able to perform in the very structured context of the literacy test will serve them well in a diversity of contexts and be indicative of the likelihood of future success.

Recommendation 5: Demonstrate how EQAO works with both the literacy research community and the educational measurement community. There is a lot of quality research being conducted in each of these fields. It is clear that EQAO has done extensive work with educational measurement in terms of the design of their testing programs even though there are areas that still need improvement. It is less apparent how literacy research has informed EQAO's literacy evaluation practices. This study serves as an example of validity research that is influenced and informed by both the educational measurement research community and the literacy research community. These fields of research are both ever-changing and constantly in flux, which presents many challenges for designing and validating a high-stakes literacy testing program. There are many ways in which these fields are likely to continue changing, which is a particular threat to standardized testing programs that strive to collect data that is comparable longitudinally. There are not many examples, as noted in Chapter 3, of how the collection of data in relation to the consequences and outcomes of implementing high-stakes testing can be conducted, which makes it difficult to observe how developing theories can be implemented in practice. It is helpful to consider how the learning and the knowledge being generated from an ever-changing and still developing field can be implemented in practice while always continuing to review and adjust practices based on new learning. Educational measurement is not about finding one absolute solution that can be confidently implemented in practice indefinitely. Continuing to reflect and striving to be adaptable and able to accommodate change is important for educational measurement, and for literacy assessment in particular, since this field continues to take shape. Demonstrating that current research is being acknowledged and integrated to support current practices is needed.

Recommendation 6: Present accurate, comprehensive, and consistent information about the literacy graduation requirement. I recognize that this is the OMOE's responsibility; however, EQAO reports extensively in regards to the literacy test, and it often seems as though this testing practice is synonymous with the literacy graduation requirement without also

consistently acknowledging there is also the literacy course and the portfolio adjudication process in which students can participate under certain conditions. When EQAO introduces the OSSLT, it is not clear that there are other ways to meet the literacy graduation requirement, or what those alternative options might be. Instead, the message that is emphasized is that successful completion of the OSSLT is mandatory for all high school students who are seeking to graduate with an Ontario high school diploma. This is not entirely true though, and there are important exceptions that should be outlined in the information resources EQAO releases. EQAO does not provide comprehensive enough information about the literacy graduation requirement. There needs to be more accurate and consistent information provided by EQAO about the graduation requirement.

Based on EQAO's reporting, it is unclear how the process of working to meet the literacy graduation requirement could unfold for diverse students who might not successfully complete the OSSLT. Given that the focus of this program is at once on ensuring that all students can meet the established standard, a considerable amount of focus should be directed to those students who are not demonstrating that they can successfully meet the test's standard. Even though EQAO does not seem to be working with or reporting on data from the literacy course or overseeing the portfolio adjudication process, information about these alternatives could at least be clearly presented by EQAO, since these are explicit alternatives to the OSSLT. It is unclear why EQAO does not seem to be more invested in the literacy course or the adjudication processes given that they are alternatives to the literacy test and they are supposed to be equivalent alternatives. As part of the accountability system, these alternative options should also be observed, analyzed, and reported on if data about students' literacy achievement is the goal. The expectation should be that these alternatives are also being made to uphold high quality standards. Given the extensive expertise EQAO has in designing the literacy test and in measuring students' achievement, EQAO could likely enhance the quality and credibility of these alternative options as well.

Another issue with the ways in which EQAO reports on the literacy test is that the documentation for the annual administration of the test is continually updated and re-presented annually, and, as a result, there are minor differences in how the testing process is being presented and summarized each year. I am considering here the documents in particular that are released to the public for information about the testing program itself, including the Information

Bulletins (e.g., EQAO, 2011e), the Preparation and Planning Guides (e.g., EQAO, 2010f, 2012f, 2014i, 2015l, 2016e), and the Getting Ready Guides (e.g., EQAO, 2010a, 2011b, 2012b, 2013b, 2014a, 2015c, 2016a). Releasing annual documents, such as the information bulletins and the guides for preparing to write the OSSLT, makes it possible to differently present information for a testing practice that is arguably largely stable and consistent over the years. One change has been the information that is released each year about scoring and how to make sense of test results. The 2010-2011 information bulletin (see EQAO, 2011e), for instance, included an overview of how to make sense of the test scores, but this information has been omitted in subsequent years. When information is missing in the documentation for the current year's test administration, it becomes more difficult to know which practices are still being upheld, but are just not being presented for information that year, and which practices might have since changed and in what ways. Changes to the documentation should be highlighted and made clear, since otherwise the testing program gives the illusion that it is remaining stagnant despite potentially undergoing reviews and revisions. It is difficult to make informed judgements about the quality of the testing program when information is not comprehensively and consistently reported. EQAO demonstrates that they make considerable efforts to release information about the design of their tests (see EQAO, 2008a, 2011e, 2016a, 2016e), how their practices are being reviewed (see EQAO, 2004a, 2004b, 2013c; Office of the Auditor General of Ontario, 2009, 2011; W. T. Rogers, 2013), and they provide a wealth of information about how the data they are constructing is being created and compared. There are also a few reports presented as infographics (see EQAO, 2012g, 2013a, 2014c, 2016b) demonstrating the results of EQAO's analysis of the data that have been produced through the OSSLT testing program. Increased clarity and consistency in terms of how EQAO is reporting on a largely unchanging practice is needed, and changes need to be more clearly noted. As previously noted, despite the wealth of information released about this testing program, there is still a lack of information and research to support the design of the test's construct and to support validity judgements and arguments about the test.

Recommendations for the Ontario Ministry of Education (OMOE)

Recommendation 7: Set higher expectations for accountability and for EQAO's work.

Higher standards are needed not only in regards to what students should be expected to be able to achieve and what they can be held accountable for but also in regards to what it is possible to

assess and learn about students' literacy education and their achievement. The OSSLT is a very narrow evaluation of a few select skills, and it is a minimum competency test. It is unclear why the current expectations are what they are, and how the six particular skills that are being measured fit within the broader literacy education context. A more sophisticated understanding of how students are expected to be reading and writing, and what those processes entail based on the Ontario curriculum, is needed to be able to justify why such a limited practice is appropriate. There are so many skills that students are developing, so it is concerning that such a limited assessment of students' literacy proficiency is being used to make a high-stakes decision. The findings of this study suggest that a high-stakes literacy test can potentially negatively influence students' literacy education when only a few skills are attributed such significant value and attention. Such considerations need to be factored into any assessments of the quality of the test-based systems being used.

There are alternative means through which data on students' achievement can be collected and reported both more broadly and with greater depth than what the OSSLT makes possible. This study demonstrates that when students engage with multimodalities, for instance, it is possible to learn a lot about students' knowledges and skills. Multiple methods are needed to be able to respond to accountability demands. It is not productive to rely on large-scale standardized testing as one sole method to collect, analyze, and report on students' literacy education and their potential for achievement. Accountability culture is demanding, and it is important to be critical of the questions that are being asked while also ensuring that the methods that will be used are well-suited to the questions they are intended to inform. As demonstrated in Chapter 4, there is still a considerable amount of work needed to continue developing an Ontario literacy curriculum. Accountability efforts that seek to understand and report on literacy education need to be mindful that the framework upon which they are basing high-stakes decision making is itself still being constructed. Research and development are needed to continue to shape the Ontario curriculum in terms of both current research and the values of the education system. Research is also needed to understand what other methods could enable stakeholders to learn more about students' achievement.

Recommendation 8: Develop a cohesive and comprehensive literacy curriculum. This recommendation is related to the recommendation that EQAO review and revise the literacy construct of the OSSLT. The construction of the OSSLT emphasizes how the literacy skills of

reading and writing are common to many courses; however, there is no clear discourse around how students' literacy skills are being evaluated through the test in any discipline-specific ways. The literacy test's evaluation criteria remain static regardless of the context of particular questions. The priorities that are highlighted are those that could be considered to be common or consistent to many different types of texts. Specialization of literacy skills is not emphasized. The Ontario curriculum has created the potential for a much broader and more complex understanding of literacies than that reflected through the OSSLT's evaluation process; however, a unified literacy curriculum that is both cohesive and comprehensive is needed. It is unclear how the current Ontario curriculum can effectively implement an interdisciplinary literacy education program, which is what the literacy graduation requirement and the literacy test seem to be based upon. The literacy graduation requirement challenges the discipline-based or subject-focused structure of programs in the current Ontario curriculum by imposing an overarching literacy curriculum, but this curriculum remains undefined as a distinct and unified curriculum. It is currently unclear how the literacy graduation requirement is intended to fit alongside all of the other graduation requirements. Literacy education is fragmented in Ontario because courses are discipline- or subject-based, and there is no unifying educational opportunity in which students are explicitly expected to learn and be able to demonstrate understanding and application of the interdisciplinarity of literacies. The participants in this study identified examples of how they engaged with reading and writing in many different courses; however, it was not as apparent how reading and writing skills were being adapted by students as they moved between and across multiple disciplines, or how they were transferring their knowledge to different contexts. If literacy remains siloed, the potential for a high quality literacy education in Ontario will remain limited.

Recommendations for Teachers

Recommendation 9: Develop and demonstrate teachers' expertise in literacy assessment. It is important to recognize the expertise and the potential for expertise that teachers have when it comes to assessment and evaluation as professional educators. Teachers need to continue demanding access and support for education and training with regards to literacy assessment to be able to uphold the highest standards for their practice. This commitment to literacy assessment is fundamental to developing an integrated culture of accountability within schools. When teachers' expertise and their capacities are valued, recognized, and supported, the power

over knowledge that externally imposed standardized testing holds can be minimized as the sole mechanism through which data of students' literacy achievement across the province is collected, analyzed, and reported. Having access to the education, resources, and networked communities for teachers to be able to work towards establishing a level of comparability across literacy assessment data sets is necessary should large-scale analyses of data in Ontario remain a priority as something that can build confidence in local evaluation systems. If teachers' assessment and evaluation practices were highly valued, this could be a way of responding to demands for accountability that are incorporated within, and fully integrated into, the education system. In such a system, monitoring would not just be from a distance; instead, teachers could be internally managing, reviewing, and improving practices on an ongoing basis. Classroom-based literacy assessment can include multiple methods of ongoing assessment, which is a luxury from a data collection and data analysis perspective. An increased focus on enhancing the quality of course-based literacy assessments could potentially increase the profile and the credibility of 'teachers as researchers' (Kincheloe, 2003; Huot, 2002). Shepard (2000) highlights that there have been considerable improvements with what class-based literacy assessment can achieve, and the field of measurement research that concerns standardized testing in particular needs to work on keeping up with the advances that are being made in other areas of educational measurement research, including classroom assessment. In the Ontario context, an increased focus on enhancing the quality of, and confidence in, classroom literacy assessments could potentially end up further threatening the validity of the OSSLT as an appropriate and productive measurement tool. Following the recommendation that the OMOE design a cohesive and comprehensive literacy curriculum that integrates the disciplinary contexts of each program, there is a related need for enhanced support for developing and using high quality literacy assessments that could reflect such a curriculum though. If there is an overarching literacy curriculum that spans across all courses, it is important to consider what assessing students' achievement in relation to an overarching curriculum might look like in practice. A call for professional learning communities focused on literacy assessment and evaluation from an interdisciplinary perspective might be needed.

Recommendation 10: Demonstrate the value of metacognitive and learning skills as literacy. The participants in this study demonstrated that they lack the language and also the metacognitive skills to be able to discuss critical literacies in particular. When discussing the

term literacy in general terms, the participants still presented limited self-assessments of their own literacy skills. Students need to be supported in learning valuable reflective skills. Students need to be able to reflect on their learning, self-assess their proficiencies, and be able to critically observe and analyze literacy processes such that they can work towards improving their own literacy knowledges and skills. Demonstrating the value of metacognitive skills and learning skills as a form of what it means to be literate and to critically engage with literacies could potentially enhance literacy education in Ontario.

Recommendations for Students

Recommendation 11: Continue to reflect and to ask questions. Students need to continue asking questions and to continue striving to learn more about the educational processes with which they engage. Students should strive to understand the literacy testing programs that they are required to participate in, and they should not have to settle for sub-par educational experiences. This includes seeking to understand which particular skills are being evaluated and based on what criteria. Students also need to continue asking for access to the resources they feel they need in order to be able to effectively engage and to be able to effectively demonstrate their knowledges and skills. Asking for help, seeking support, and using available resources, as well as requesting access to additional resources that might enhance one's experience, is important. The participants in this study suggested that not being able to ask questions and not being able to consult relevant resources to help them generate their thinking while writing the OSSLT made engaging with some of the test items particularly challenging. When restrictive spaces limit students' potential to succeed, they need to be able to ask questions and they need to be able to advocate for themselves as members of a learning community. Students are being held accountable for their learning, but the students participating in this study did not seem to all have a sophisticated enough understanding of what was expected of them in terms of the expectations of the literacy test or even of the Ontario curriculum more broadly.

Recommendation 12: Understand expectations and set goals. Students are responsible for meeting the expectations of the Ontario curriculum in line with the established performance standards. Thus, students need to work on developing the knowledge and skills that make it possible to demonstrate that they understand what is expected of them. Identifying the expectations that they value most could help students personalize their learning experiences. Goal setting is a fundamental part of the process of self-directed literacy learning, and practicing

goal setting might help students feel more connected to, and invested in, their literacy education. Students could also potentially be part of a shift that recognizes that there are many other ways to report on and to represent achievement. Rather than always relying on what others determine students to be capable of, students can also work on developing the knowledges and skills that make it possible for them to effectively assess their own learning and literacy performances. Students need to be challenging themselves and striving to develop metacognitive and reflective skills. Some of the participants in this study demonstrated that they were able to define their literate identities based on more than just their course marks or their test results.

Recommendations for Education Researchers

Recommendation 13: Continue to develop the hybrid space of literacy assessment research.

This recommendation parallels the recommendation that EQAO work with both educational measurement researchers and literacy researchers. The hybrid space that bridges literacy education research and educational measurement research is developing, but more work is needed to be able to advance what can be learned through large-scale literacy testing programs. Additional research into alternative forms of high-quality literacy assessments is needed to demonstrate how a complex literacy construct can be measured through multiple modes, what methods can be used to analyze collected data, and what reporting practices appear to be effective for students in different contexts. This work is needed to demonstrate that there are many different ways in which it is possible to learn about and report on students' literacy achievement, and that a standardized test is only one limited method. This study demonstrates that it is important to continue to question what a standardized literacy test is and is not measuring. It also demonstrates that there is much that can be learned through the proposed methodology for collecting and analyzing the outcomes of a testing program in relation to the construct of a test.

As an extension of this research, it might be productive to consider if any standardized test can adequately capture the richness and the complexity of an ever-changing and shifting literacy construct. As noted in Chapter 1, what prompted this study was a reflection on the challenge of designing a high quality assessment tool that could provide high quality and productive data on students' achievement. Research is needed between the fields of educational measurement and literacy research to find methods that are commensurate with what it means to engage with literacies in diverse ways. Being able to reflect on how an individual engages with literacies can

help further enhance an individual's learning, and, depending on the data being collected, it can potentially also create opportunities to enhance the education system in which the individual participates.

Recommendation 14: Consider designing pan-Canadian studies to learn more about students' understandings and experiences of literacies in diverse educational contexts across Canada. Given the ever-changing and expanding landscape of high-stakes literacy testing in Canada, a pan-Canadian study into the different provincial practices could be a productive learning opportunity. There is great potential to learn from how other literacy curricula are being differently defined and constructed across Canada and from the different ways in which high-stakes literacy tests are being constructed, implemented, and even gradually redesigned across Canada. The work of EQAO stands as a potential model in Canada, as Ontario was the first province to have developed a clearly entitled literacy test that is associated with a graduation requirement. It is concerning to see how other provinces, including New Brunswick, Prince Edward Island, and, most recently, also British Columbia have gradually been shifting towards models that are comparable to the Ontario model. (See Chapter 1 for an overview of what high-stakes language and literacy testing looks like across Canada.) There are significant curricular differences across the provinces and also considerable differences in regards to how high-stakes literacy testing is occurring. A comparative analysis of how these literacy testing programs are being designed and implemented, and with what potential outcomes, could be quite productive for advancing literacy assessment across Canada.

Further Extensions of the Research & Moving Beyond the Research Questions

In the previous section, I noted how the findings of this research can inform a set of recommendations, which suggests that there are numerous potential implications of the research. In this section, I present a few further extensions of the research that involve moving beyond the specific research questions. In particular, I return to the broader questions and wonderings about literacy assessment and standardized literacy testing that were presented in the introduction. Although the focus of this study was on questioning how underrepresented aspects of a test's construct might manifest themselves in terms of students' understandings and experiences of literacies, and the study made it possible to critically consider how a high-stakes test might be perceived to have an influence on students' understandings and experiences, there remain many

unanswered questions about standardized literacy testing. The following are five issues that relate to this study:

- *The Commensurability of Literacies and Standardized Testing Practices:* Throughout this study, I questioned standardized testing as a research practice, and I wondered what this practice makes possible in relation to literacy education. Having judged one high-stakes literacy test based on what it claims to be able to achieve, it remains unclear why standardized testing is the selected research method being used as a way to learn about students' literacy education. Many aspects of what literacy engagements entail are excluded from the testing context that was reviewed in this study. So much has been filtered out of the assessment context that it is unclear what is actually being reported and how the constructed data can be recontextualized more broadly. It is unclear how this standardized literacy testing program can adequately capture and report results that can be interpreted as a meaningful reflection of an individual's knowledges and skills. Literacy is a complex way of explaining what engagement with the world can entail, and standardizing a measurement restricts what will count as evidence of literacy. Ensuring sufficient construct coverage, and striving to maximize construct coverage, should always be the goal when the intention is to construct data that are expected to be representative of a broader domain. The findings of this research also suggest that there are concerning potential outcomes of using a high-stakes test that is based on a limited literacy construct. More research is needed to understand if and how standardized testing might be able to productively serve literacy education. If standardized testing is the chosen assessment practice, this practice needs to be able to effectively measure the construct it claims to be able to measure and report on, and it needs to be able to do so without undesirable consequences or outcomes.
- *Capturing Literacies in any Assessment:* Throughout this study, I highlighted the challenge of trying to representatively capture literacies in the form of a measurable construct. While it might never be possible to report on literacy achievement in any comprehensive manner, it is perhaps productive to consider what a compatible series of tools might look like that align with the proposed critical literacies construct. How can assessment tools be designed and learning opportunities be created to make it possible for students to metacognitively and reflexively engage with literacies in ways that can enhance their literacy education?
- *Minimum Competency Testing and Setting Expectations and Standards:* How can a minimum competency model benefit students? High-stakes standardized tests hold considerable power in determining what proficiency looks like in a testing context and beyond. They also hold considerable power in asserting what counts as evidence of proficiency. A necessary aspect of a standardized measurement process is the identification and/or establishment of a particular standard, or multiple standards, of achievement. Based on the findings of this study, it is unclear why minimum competency

is the standard being set for the literacy test being reviewed, or why that is the goal students should be focused on. I wonder how differently students' literacy proficiency would be characterized were a different sampling of the expected curriculum construct measured. It might be productive to consider, as an extension of this research, how large-scale literacy assessments could differ if the sole intention were to use test scores to encourage and enhance continued learning.

- *Enhancing Literacy Education by Using Assessments and Assessment Results:* One of the questions presented in the introduction of this study asked: How can literacy assessment positively contribute to students' ongoing literacy education? More specifically, and in line with the focus of this study, I wondered how standardized testing could productively serve students' education. Assessment practices are research practices in that they make it possible to collect, analyze, and report on data. When meaningfully designed, an assessment program can be used to critically reflect on learning experiences, and the results of the assessment can be used to promote and enhance continued learning. Many of the participants in this study suggested that they were not learning anything new from the literacy test though. Shifting the focus away from accountability towards enhanced learning could potentially result in different learning outcomes and might make a literacy assessment a productive learning experience. When meeting a standard is the sole objective, the focus is not on how to continue to excel beyond that standard.
- *Alternatives to Validity Research as a Critical Lens for Educational Measurement:* This study demonstrated the value in critically analyzing the construct of an assessment, as well as analyzing construct-related outcomes. The conceptual framework guiding the design of this study was informed by validity research, and qualitative and interpretive methods were used to make possible the layering of multiple texts, which was necessary when working with both the curriculum and the documentation surrounding the measurement context. As an extension to this research, I wonder what other critical lenses could be used to systematically and thoroughly research a literacy assessment practice such that the use of an assessment tool could be critically assessed.

Final Thoughts

This study has investigated the potential outcomes of learning about literacies in an educational context that includes a high-stakes test. This study focused specifically on one underrepresented aspect of a particular test's literacy construct. When considering the findings of this research, it is important to consider that the ten cases presented in this study are a small sample of the students participating in the test-based accountability program. There were over 150,000 students eligible to participate in writing the OSSLT in 2015 and 2016 (EQAO, 2015k, 2016d), there were over 160,000 students eligible in each of 2012, 2013, and 2014 (EQAO, 2012e, 2013h,

2014h), and there were over 170,000 students eligible in 2010 and 2011 (EQAO, 2010a, 2011i). Coming back around to the Canadian context that was introduced in the opening of the dissertation, the Ontario context is also just one example of how language and literacy testing is developing across Canada. Continued research is needed to better understand how large-scale, high-stakes, standardized literacy testing programs are influencing students' literacy education. The recommendations presented in this concluding chapter are calls for leadership in regards to literacy education and literacy assessment. Although this research focuses on the Ontario context as one example where a test-based accountability program might be influencing the outcomes of students' literacy education, the methods proposed and what has been learned about the potential outcomes of using a high-stakes standardized testing program that is based on a limited construct has the potential to prompt critical reassessments of other testing programs. Cronbach argues, "Validation advances on a broad front; what we learn about one test bears on others" (Cronbach, 1988). What can be learned by practicing validity research in one context can potentially be transferred and recontextualized to assess the quality of other testing programs as well.

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APPENDIX A: Additional Resources for the Initial Mapping

This appendix provides additional resources to complement the presentation of the findings of the initial construct mapping process presented in Chapter 4 (see Figure 6).

Reading the Representation of the Initial Mapping: Coding Resources

Table A1 presents the curriculum strands and the expectations that were mapped onto the critical literacies construct. Table A2 presents the coding labels used to identify the test items that were mapped onto the curriculum. The test items are also identified in relation to whether the focus of the test item is on reading or writing skills, the type of test item, and which skill(s) EQAO claims to measure.

Table A1. *Ontario Grade 9 English Curriculum: Strands and Expectations*

Oral Communication ^a (O)			
1. Listening to Understand	2. Speaking to Communicate	3. Reflecting on Skills and Strategies	
1.1 Purpose	2.1 Purpose	3.1 Metacognition	
1.2 Using Active Listening Strategies	2.2 Interpersonal Speaking Strategies	3.2 Interconnected Skills	
1.3 Using Listening Comprehension Strategies	2.3 Clarity and Coherence		
1.4 Demonstrating Understanding of Content	2.4 Diction and Devices		
1.5 Interpreting Texts	2.5 Vocal Strategies		
1.6 Extending Understanding of Texts	2.6 Non-Verbal Cues		
1.7 Analy[z]ing Texts	2.7 Audio-Visual Aids		
1.8 Critical literacy			
1.9 Understanding Presentation Strategies			
Reading and Literature Studies ^b (R)			
1. Reading for Meaning	2. Understanding Form and Style	3. Reading with Fluency	4. Reflecting on Skills and Strategies
1.1 Variety of texts	2.1 Text forms	3.1 Reading familiar words	4.1 Metacognition
1.2 Using reading comprehension strategies	2.2 Text features	3.2 Reading unfamiliar words	4.2 Interconnected Skills
1.3 Demonstrating understanding of content	2.3 Elements of style	3.3 Developing vocabulary	
1.4 Making inferences			
1.5 Extending understanding of texts			
1.6 Analyzing texts			
1.7 Evaluating texts			
1.8 Critical literacy			
Writing ^c (W)			
1. Developing and Organizing Content	2. Using Knowledge of Form and Style	3. Applying Knowledge of Conventions	4. Reflecting on Skills and Strategies
1.1 Identifying Topic, Purpose, and Audience	2.1 Form	3.1 Spelling	4.1 Metacognition
1.2 Generating and Developing Ideas	2.2 Voice	3.2 Vocabulary	4.2 Interconnected Skills
1.3 Research	2.3 Diction	3.3 Punctuation	4.3 Portfolio
1.4 Organizing Ideas	2.4 Sentence Craft and Fluency	3.4 Grammar	
1.5 Reviewing Content	2.5 Critical Literacy	3.5 Proofreading	
	2.6 Revision	3.6 Publishing	
	2.7 Producing Drafts	3.7 Producing Finished Works	

Media Studies ^d (M)			
1. Understanding Media Texts	2. Understanding Media Forms, Conventions, and Techniques	3. Creating Media Texts	4. Reflecting on Skills and Strategies
1.1 Purpose and Audience	2.1 Form	3.1 Purpose and Audience	4.1 Metacognition
1.2 Interpreting Messages	2.2 Conventions and Techniques	3.2 Form	4.2 Interconnected Skills
1.3 Evaluating Texts		3.3 Conventions and Techniques	
1.4 Audience Responses		3.4 Producing Media Texts	
1.5 Critical Literacy			
1.6 Production Perspectives			

Note. The numbering and the titles of the expectations are from the Grade 9 English curriculum (see OMOE, 2007) for both the Academic (ENG1D) and Applied (ENG1P) courses. Abbreviations (e.g., O, R, W, M) were added.

^a The ‘Oral Communication’ strand and all listed expectations are from the ENG1D/1P curriculum (OMOE, 2007, pp. 42-44, 56-58).

^b The ‘Reading and Literature Studies’ strand and all listed expectations are from the ENG1D/1P curriculum (OMOE, 2007, pp. 45-47, 59-61).

^c The ‘Writing’ strand and all listed expectations: ENG1D/1P curriculum (OMOE, 2007, pp. 48-51, 62-65).

^d The ‘Media Studies’ strand and all listed expectations are from the ENG1D/1P curriculum (OMOE, 2007, pp. 52-54, 66-68).

Table A2. *Overview of the April 2010 OSSLT Released Test Items*

Section of Test	Part of Construct	Type of Test Item	Coding Labels	Skill Evaluated (1 per Test Item) ^a
Booklet 1: Section I	Reading	News Report, 5MC, 1OR	1.1 - 1.5, 1.6	R1 ^b , R2, R2, R3, R1, R3
Booklet 1: Section II	Writing	MC Questions Set 1, 4MC	2.1 - 2.4	W1 ^c , W2, W3, W3
Booklet 1: Section III	Writing	Short Response 1	3.1	W4 and W3
Booklet 1: Section IV	Writing	News Report, 1 page	4.1	W4 and W3
Booklet 1: Section V	Reading	Info. Para., 6MC, 1OR	5.1 - 5.6, 5.7	R1, R1, R2, R3, R2, R2, R2
Booklet 2: Section VI	Writing	Opinion Piece, 2 pages	6.1	W4 and W3
Booklet 2: Section VII	Writing	MC Questions Set 2, 4MC	7.1 - 7.4	W2, W3, W1, W3
Booklet 2: Section VIII	Reading	Real-life Narrative, 9MC	8.1 - 8.9	R1, R2, R2, R2, R3, R3, R1, R2, R2
Booklet 2: Section IX	Reading	Dialogue, 5MC, 2OR	9.1 - 9.7	R2, R2, R2, R2, R3, R2, R3
Booklet 2: Section X	Writing	Short Response 2	10.1	W4 and W3
Booklet 2: Section XI	Reading	Graphic Text, 6MC	11.1 - 11.6	R3, R1, R2, R2, R2, R2

Note. Information about the test items and the skills being evaluated is from EQAO (2011d, pp. 167-168). MC = Multiple choice; OR = Open response.

^a The four short and long written responses are each evaluated using two rubrics (one for ‘W3’ and one for ‘W4’).

Every other test item is evaluating one particular skill. The skills are listed in order following the sequence of the listed test items. For example, test item 1.2 would be evaluating R2, and test item 8.7 would be evaluating R1.

^b Reading Skill (R); The reading skills being evaluated are identified by EQAO as follows: “R1 = understanding explicitly; R2 = understanding implicitly; R3 = making connections” (EQAO, 2011d, pp. 167-168).

^c Writing Skill (W); The writing skills being evaluated are identified by EQAO as follows: “W1 = developing main idea; W2 = organizing information; W3 = using conventions; W4 = topic development” (EQAO, 2011d, pp. 167-168). ‘W4’ appears to be a combination of evaluating W1 and W2 through a single rubric.

Select Readings of the Initial Mapping and Observations

In this section, I present two possible methods for selectively reading the initial mapping. The first reading considers how the mapping can be read by focusing on a particular skill that EQAO claims to be measuring. For this reading, the starting point for learning something about the test

is the test itself. This reading makes it possible to consider the potential alignment between the test items and the curriculum based on EQAO's evaluative claims. Although some test items potentially afford students multiple opportunities to engage, EQAO claims to measure only a few particular skills. This reading could be performed for each of EQAO's six measured skills.

As one example of what this first reading method might look like, Table A3 lists the test items that are used by EQAO to measure Reading Skill 3 (R3). Reading Skill 3 is making connections. The literacy test includes six multiple choice and two open-response test items that are used to evaluate this skill. By isolating these items within the mapping, it is possible to see how the evaluation conducted through the test could potentially align with the curriculum. The test items that have been identified were coded as potentially making it possible for students to engage with reading both familiar and unfamiliar words, making inferences, considering elements of style and text features, and producing drafts (see Table A3). These skills are not all explicitly being evaluated though. For instance, no test item is used to measure both reading and writing skills. Thus, although the two open-response items give students an opportunity to write, their writing skills (e.g., W2.7 Producing Drafts) are supposedly not being evaluated.

Table A3. *Mapped Test Items Related to EQAO's 'R3' – Making Connections*

Test Item (OSSLT, April 2010)	Mapped Curriculum Expectation(s)	Mapped Construct Component
1.4 News Report, MC	R3.1 Reading Familiar Words R3.2 Reading Unfamiliar Words	Analyzing Texts; Analyzing Texts
1.6 News Report, OR	R1.4 Making Inferences R1.5 Extending Understanding of Texts W2.7 Producing Drafts	Analyzing Texts; Analyzing Texts; Responding Critically
5.4 Info. Paragraph, MC	R1.4 Making Inferences	Analyzing Texts
8.5 Real-life Narrative, MC	R3.1 Reading Familiar Words R3.2 Reading Unfamiliar Words	Analyzing Texts; Analyzing Texts
8.6 Real-life Narrative, MC	R2.3 Elements of Style	Analyzing Texts
9.5 Dialogue, MC	R1.3 Demonstrating Understanding of Texts	Analyzing Texts
9.7 Dialogue, OR	R1.4 Making Inferences R1.5 Extending Understanding of Texts W2.7 Producing Drafts	Analyzing Texts; Analyzing Texts; Responding Critically
11.1 Graphic Text, MC	R2.2 Text Features	Analyzing Texts

Note. EQAO associated each of these test items with Reading Skill 3 (R3): Making Connections (see EQAO, 2011d, pp. 167-168). Information about the test items and the skills being evaluated is from EQAO (2011d, pp. 167-168). The curriculum expectations (i.e., the numbering and the titles) are part of the English curriculum (OMOE, 2007, pp. 42-68). R = Reading and Literature Studies; W = Writing; MC = Multiple choice; OR = Open response.

The initial mapping shows where there is potential for test takers to engage with critical literacies, but when EQAO's focus on explicitly evaluating a particular skill is taken into account

for each test item, the test has fewer connections with the curriculum, and, thus, also fewer connections with the proposed theoretical literacy construct.

An alternative way to read the initial mapping is to ask how the components of the construct are reflected in both the curriculum and the test. This second reading is guided by the construct. Table A4 presents an example of this second type of reading illustrating how *Analyzing Texts*, which is one of the four primary components of the proposed literacy construct, is represented in the curriculum and in the test. Table A4 lists the curriculum expectations that have a mapped test item that makes it possible to engage with this part of the critical literacies construct. The skills that EQAO claims to be measuring through each of the mapped test items are also listed.

Table A4. *Construct Representation: Analyzing Texts*

Mapped Curriculum Expectation	Mapped Test Item(s)	Skills Evaluated (1 per Test Item)
R1.3 Demonstrating Understanding of Content	1.2, 1.3 News Report, 2MC	R2 ^a , R2
	5.1, 5.3, 5.6, 5.7 Info. Paragraph, 3MC, 1OR	R1, R2, R2, R2
	9.4, 9.5, 9.6 Dialogue, 3MC	R2, R3, R2
	11.4, 11.5 Graphic Text, 2MC	R2, R2
R1.4 Making Inferences	1.6 News Report, 1OR	R3
	5.4 Info. Paragraph, 1MC	R3
	8.1, 8.2, 8.4, 8.7, 8.9 Real-life Narrative, 5MC	R1, R2, R2, R1, R2
	9.1, 9.3, 9.6, 9.7 Dialogue, 2MC, 2OR	R2, R2, R2, R3
	11.6 Graphic Text, 1MC	R2
R1.5 Extending Understanding of Texts	1.6 News Report, 1OR	R3
	9.7 Dialogue, 1OR	R3
R1.6 Analyzing Texts	8.8 Real-life Narrative, 1MC	R2
R1.7 Evaluating Texts	8.8 Real-life Narrative, 1MC	R2
R1.8 Critical Literacy	8.9 Real-life Narrative, 1MC	R2
R2.1 Text Forms	11.3, 11.4, 11.5 Graphic Text, 3MC	R2, R2, R2
R2.2 Text Features	11.1, 11.3, 11.4, 11.5 Graphic Text, 4MC	R3, R2, R2, R2
R2.3 Elements of Style	5.2 Info. Paragraph, 1MC	R1
	8.6 Real-life Narrative, 1MC	R3
	9.2 Dialogue, 1MC	R2
R3.1 Reading Familiar Words	1.4, 1.5 News Report, 2MC	R3, R1
	5.1, 5.5 Info. Paragraph, 2MC	R1, R2
	8.3, 8.5 Real-life Narrative, 2MC	R2, R3
	11.2 Graphic Text, 1MC	R1
R3.2 Reading Unfamiliar Words	1.1, 1.4, 1.5 News Report, 3MC	R1, R3, R1
	5.5 Info. Paragraph, 1MC	R2
	8.3, 8.5 Real-life Narrative, 2MC	R2, R3
	11.2 Graphic Text, 1MC	R1
M1.2 Interpreting Messages	4.1 News Report, 1 page ^b	W4 ^c and W3
M2.1 Form	4.1 News Report, 1 page	W4 and W3
M2.2 Conventions and Techniques	4.1 News Report, 1 page	W4 and W3

Note. The curriculum expectations (i.e., the numbering and the titles) are from the English curriculum (see OMOE, 2007, pp. 42-68). Information about the test items and the skills being evaluated is from EQAO (2011, pp. 167-168). R = Reading and Literature Studies; M = Media Studies; MC = Multiple choice; OR = Open response.

^a Reading Skill (R); The reading skills being evaluated are identified by EQAO as follows: “R1 = understanding explicitly; R2 = understanding implicitly; R3 = making connections” (EQAO, 2011d, pp. 167-168).

^b The 1-page news report is a long written responses, and it is evaluated using two rubrics (one for ‘W3’ and one for ‘W4’) Every other test item is evaluating one particular skill, which are listed in order following the sequence of the listed test items. For example, test item 1.2 would be evaluating R2, and test item 9.5 would be evaluating R3.

^c Writing Skill (W); The writing skills being evaluated are identified by EQAO as follows: “W1 = developing main idea; W2 = organizing information; W3 = using conventions; W4 = topic development” (EQAO, 2011d, pp. 167-168). ‘W4’ appears to be a combination of evaluating W1 and W2 through a single rubric.

Considering the test items that are mapped onto the curriculum, it seems as though R1 (Understanding explicitly stated information and ideas), R2 (Understanding implicitly stated information and ideas), and R3 (Making connections), as well as W3 (Using conventions) and W4 (Developing a main idea and organizing information) relate to what it means to analyze texts from a critical literacies perspective. W4 seems to be used by EQAO to reflect a combined evaluation of W1 and W2 (see EQAO, 2011d, pp. 167-168). Thus, all six skills that EQAO claims to measure relate to this component of the construct. Since there are no curriculum expectations in the Grade 9 English courses that reference working with explicit (R1) and implicit (R2) information, which are two of the skills that EQAO claims to measure, this mapping serves to identify some of the ways through which EQAO might be measuring these skills indirectly based on how students demonstrate understanding content (R1.3), how they make inferences (R1.4), how they interpret elements of style (R2.3), how they read familiar words (R3.1), and/or how they read unfamiliar words (R3.2). Through this reading of the initial mapping, it becomes possible to consider what each of the evaluated skills might entail, and what assumptions might be informing the evaluation of students’ test performances in relation to each skill.

APPENDIX B: Additional Resources for the Expanded Mapping – Part One

This appendix presents an overview of the first four phases of the expanded mapping process.

Determining a Common Curriculum (Phase 1: Curriculum Identification)

The first phase of the construct analysis process focused on identifying the curriculum that is common to all Ontario students who will be writing the OSSLT. The focus of the Ontario literacy accountability program is on all students as a uniform collective. Although not all high school students complete the same courses or meet the same set of learning expectations by the time they graduate, a standardized expectation has been established for literacy. If there are any unique literacies that are learned and that are expected of students enrolled in particular streamed courses, or across the range of optional courses that students might select, those literacies cannot be evaluated through the literacy test. The literacy test cannot ethically evaluate any skills that not all students have had a sufficient opportunity to learn prior to being evaluated.

Graduation requirements. The first step was identifying what is expected of all students in order to graduate in Ontario. The Ontario Secondary School Diploma (OSSD) requirements (see OMOE, 2011b, p. 54-61) are presented in Figure B1.

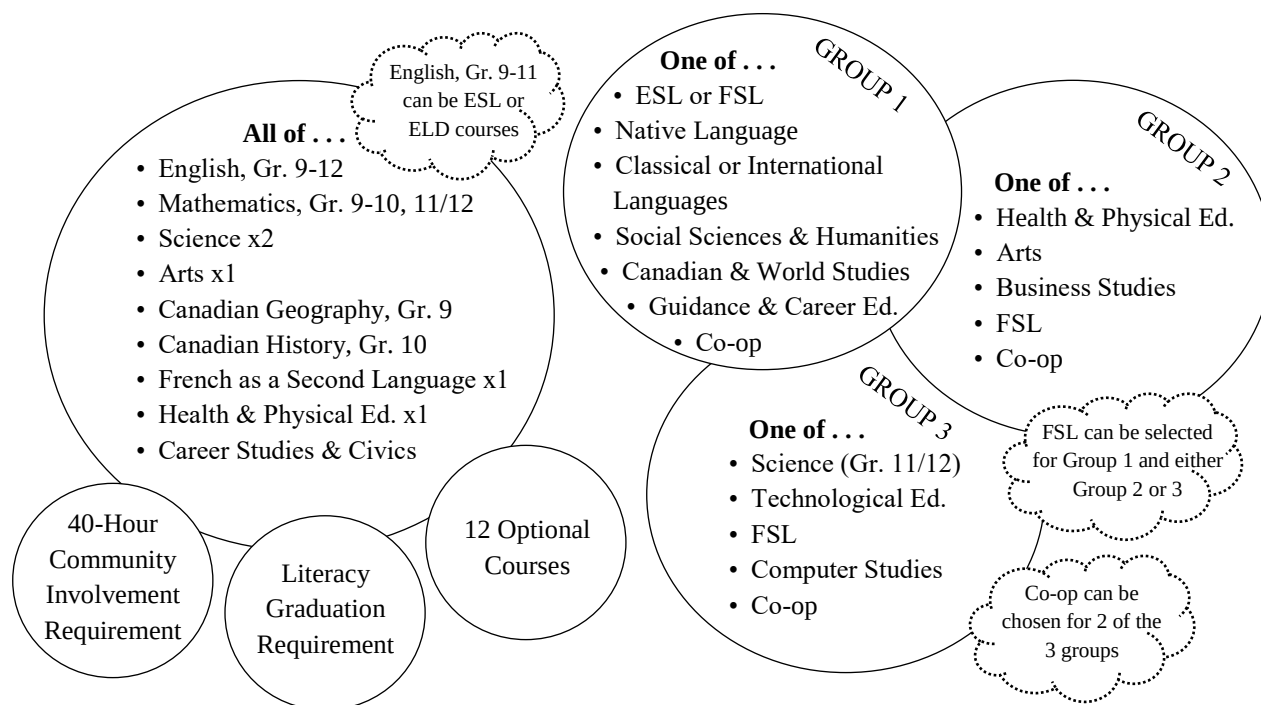


Figure B1. Overview of OSSD Requirements

Note. Information about the Ontario Secondary School Diploma (OSSD) requirements is from OMOE (2011b, pp. 54-56). The information has been spatially and graphically represented here as part of the current inquiry. ESL = English as a Second Language; ELD = English Literacy Development; FSL = French as a Second Language; Co-op = Cooperative Education.

Courses being considered. The literacy graduation requirement, as well as the literacy test, focus only on what students are expected to have achieved by the end of Grade 9. Thus, for this analysis, only the courses that all students are expected to have completed by the end of Grade 9 are being considered. From each of the three groups of courses, students have the option of selecting a Grade 10, 11, or 12 course; thus, it is possible that some students will not take any of the listed courses in these groups by the end of Grade 9. For instance, students who are interested in selecting either Co-op or FSL, from Groups 1 and 2, and selecting Science (Gr. 11 or 12) from Group 3, will not be taking any of the other courses listed. Similarly, none of the optional courses that students can choose from can be factored into this analytical work. Not all students are expected to take the same courses, and there is no requirement that a student must complete a course from this set by the end of Grade 9. Although there might be literacy expectations that are common to all of the courses in a particular group, the issue is that not all students will necessarily complete the course they select by the end of Grade 9. The community involvement requirement is also not included within this construct analysis. It is possible that students will not begin working towards this requirement and/or satisfy this requirement by the end of Grade 9.

The following eight courses are being included within this construct mapping:

- Grade 9: Mathematics (OMOE, 2005), English (OMOE, 2007), Science (OMOE, 2008), Canadian Geography (OMOE, 2013b), French as a Second Language (OMOE, 2014b)
- Grade 8: Health and Physical Education (OMOE, 2015b), Arts (OMOE, 2009), History (OMOE, 2013a)

I focused predominantly on Grade 9 courses with the understanding that as the grade levels increase, more is expected of students, and the development of their literacy skills continues or expands. There are a few instances when Grade 8 courses are being considered and included in this analysis. In these cases, there is no disciplinary counterpart at the Grade 9 level that all students are required to complete by the end of Grade 9. The five Grade 9 courses listed are all compulsory courses, and all students working towards the OSSD are expected to complete these courses by the end of Grade 9. Although the list of graduation requirements in *Ontario Schools: Kindergarten to Grade 12: Policy and Program Requirements* (OMOE, 2011b) does not clearly

state that the French as a Second Language (FSL) requirement must be the Grade 9 course, the Grade 10 course lists Grade 9 FSL as a prerequisite (OMOE, 2011b, p. 55). Thus, to be able to satisfy the requirement for French as a Second Language between Grades 9 and 12, students would typically have to begin by taking the Grade 9 course. This same reasoning justifies the inclusion of the Grade 9 Science courses. There is an exception though for the French as a Second Language graduation requirement, which states: “Students who have taken Native languages in place of French as a second language in elementary school may use a Level 1 or 2 Native language course to meet the compulsory credit requirement for French as a second language” (OMOE, 2011b, p. 55). Since some students have the option to take a course other than the FSL courses, only expectations that are common to all courses should be included in the construct analysis. Working with the Native Languages program (OMOE, 1999) raises particular challenges though because the term *literacy* is not integrated into this program. The Native Languages curriculum has not yet been reviewed as part of the ongoing review of the Ontario curriculum (see OMOE, 2016b). This exceptional case is noted such that the inclusion of ideas and expectations from the FSL program can be read with additional awareness about the status of their inclusion.

Working with streamed courses. Although all students are expected to take the eight courses that have been identified as being common to all students, there are multiple versions of these courses. All of the Grade 9 courses included in this analytical work are streamed. Grade 9 Mathematics, English, Science, and Geography are streamed into academic and applied courses. For Grade 9 French as a Second Language, students might have the option of taking either Core French, Extended French, or French Immersion, depending on which programs are offered in their schools, and each of these programs includes streamed courses. The focus of this phase of the analysis was on identifying what is common between the streamed versions of the courses. When all of the streamed versions of the five Grade 9 courses were included, there were seventeen unique courses being reviewed.

Highlighting the differences between the streamed courses is particularly significant in the context of the literacy test given that EQAO highlights that students who are taking Academic English consistently and dramatically outscore students who are taking Applied English. As reported by EQAO (2016d), 92% of the 95,971 first-time eligible students who were enrolled in Academic English were successful during the 2016 test administration (p. 54), in contrast to only

47% of the 24,772 first-time eligible students who were enrolled in Applied English course (p. 55). There were also 2,307 students participating in writing the OSSLT who were in a locally developed English course, which is an alternative option that might be available to students, and only 11% of these first-time eligible students were successful (p. 56). EQAO does not provide this type of information for previously-eligible students.

According to the OMOE (2011b), academic courses focus on “the study of theory and abstract problems.” These courses address both “essential” and “related” concepts, and they “incorporate practical applications as appropriate” (2011b, p. 65). Applied courses focus on “practical applications and concrete examples” while addressing the “essential concepts of a subject” (2011b, p. 65). An open course is “designed to broaden students’ knowledge and skills in subjects that reflect their interests” (OMOE, 2011b, p. 65). Open courses are less destination-focused (e.g., postsecondary education or workplace), and are intended to be “appropriate for all students” (OMOE, 2011b, p. 65). For the present analysis, there is only one instance of an open course, which is for Core French.

Given the differences in the focus of the courses, it is not surprising that there are some significant curricular differences between some of the academic and applied courses. A thorough mapping of the streamed courses revealed that the two language courses, French as a Second Language (FSL) and English, include differences that are more subtle in contrast to those found across the other streamed courses (i.e., Mathematics, Science, and Geography). Although academic courses are supposed to focus on theories and abstract concepts and the applied courses are supposed to focus on practical applications and examples, this does not seem to be one of the ways in which the academic language courses are distinguished from the applied language courses. Both streams of the language courses focus on what concrete examples and applications of concepts and theories might look like.

For the FSL programs, the curricular differences relate to (a) the types of topics students engage with in the courses; (b) the types, length, and complexity of texts students work with; (c) the differences between working with prepared or spontaneous texts; and (d) the study of different French-speaking communities. Where the curricular differences raise challenges for a standardized test that all students will be writing is how the contexts and types of texts presented on the test can be determined fairly. The context in which students have learned must be considered when transitioning into an evaluation context.

Table B1 presents an overview of the differences present between the applied and academic streams for Grade 9 English that are relevant to the measurement context. One of the expectations that differs across the two courses is “Making Inferences” (OMOE, 2007, pp. 45, 59). For the academic course, there is an explicit mention of making, explaining, and supporting an inference using ideas from a text. For the applied course, the expectation appears to focus on making inferences using ideas, but the expectation is not that students also have to explain or to support an inference with ideas from a text. The difference in the language used is significant given that there are so few differences across the two English courses, so this particular difference stands out. This skill is also one of the few skills assessed on the literacy test. It is important to consider how students are potentially being differently exposed to the process of making inferences. For the academic course, there is also an extended layer of critical consideration that is expected regarding the relationship between a text and the audience reading a text, which is not included in the applied course. It is important to consider how this additional awareness about the writing process might differently influence how students from these two courses approach writing tasks.

Table B1. *Differences Between Applied and Academic Streams for Grade 9 English*

Applied English (OMOE, 2007)	Academic English (OMOE, 2007)
By the end of Grade 9, students are expected to be able to demonstrate that they can: • Engage with “a few” strategies (pp. 56-68) • Engage with “some teacher-selected” complex texts (pp. 56-58, 59-60, 66) • “[I]dentify” how presentation strategies are used (in oral texts) (p. 57) • Read “contemporary” texts (p. 59) • “[M]ake inferences” about texts “using stated and implied ideas from the texts” (p. 59) • “[U]se a few different decoding strategies to read and understand unfamiliar words” (p. 61) • Use interconnected skills (p. 61) • Use descriptive “words, phrases, and expressions to make their writing clear for their intended audience” (p. 63) • Consider “different presentation features, including print and script, font, graphics, and layout, to improve the clarity of their written work” (p. 65)	By the end of Grade 9, students are expected to be able to demonstrate that they can: • Engage with “several” strategies (pp. 42-54) • Engage with complex texts (p. 45). Texts are not specified as being teacher-selected. • “[E]xplain” how presentation strategies are used (in oral texts) (p. 43) • Read texts from diverse “historical periods” (p. 45) • “[M]ake and explain inferences” about texts “supporting [. . .] explanations with stated and implied ideas from the texts” (p. 45) • “[U]se appropriate decoding strategies to read and understand unfamiliar words” (p. 47) • Use interconnected skills “and explain how the skills help them read more effectively” (p. 47) • In addition to using descriptive words, use “evocative” language that makes their writing “vivid” (p. 49) • In addition to considering textual presentation and features, consider how to “influence” an audience (pp. 51, 53)

For the Mathematics, Science, and Geography courses, the changes between streamed courses were more apparent at a global level, and the details of the specific expectations were significant. For the present analysis, rather than mapping the common curriculum for these courses, I worked from the full curriculum, and I was cautious to always search for a common expectation in each streamed course. When the expectations are considerably different across academic and applied courses for a particular subject area, it is challenging to identify expectations that are common for all students. This is especially problematic for a high-stakes standardized test that must be based on a common curriculum. In these courses, there are quite a few expectations that are held uniquely for some Grade 9 students. Thus, these expectations have been eliminated from consideration in the current construct analysis.

Determining a Common Literacy Curriculum (Phase 2: Construct Development)

The next phase in the construct analysis process was to identify what a common literacy curriculum might look like for Ontario education. This phase of the analysis considered how literacy is introduced conceptually across the common curriculum. All of the components of the curriculum were taken into consideration. I reviewed the introductions, the objectives of the programs, any references to supplementary resources, the glossaries, as well as the strands and both the overall and specific expectations. The peripheral content of the curriculum documents was carefully considered because a search for the words *literacy* and *literacies* across the curriculum expectations did not yield many results. The Grade 9 English course is the only course included in this review that has an explicit literacy expectation integrated within the course. For each of the four strands of Grade 9 English, there is an expectation entitled “Critical Literacy,” and this expectation exists in both the academic (see OMOE, 2007, pp. 43, 46, 49, 52) and the applied streams (see OMOE, 2007, pp. 57, 60, 63, 67).

As noted in Chapter 4, the challenge in working with the Ontario curriculum is balancing the philosophies and the values that appear in the introductory matter and glossaries of the curriculum documents with the learning expectations of each course presented in the curriculum. Working first at the program level, and seeking to understand how literacy is conceptualized in the context of a particular program is necessary to then be able to attempt to unpack that particular conceptualization in terms of the expectations of a particular course. The philosophies, the values, and the concepts that are presented as the framework for particular programs should be integrated into the expectations and they should be observable as integral aspects of the

courses. In addition to searching for curriculum expectations that appear to be explicitly associated to particular concepts presented, I also searched for expectations that could possibly be related to the concepts presented. This is where it becomes clear that interpretation plays a role in understanding the goals of the curriculum and how they are supposed to relate to students' learning. My analysis of the Ontario curriculum can be organized based on the following observations: (a) literacy is a cross-curricular concept in Ontario; (b) the Ontario curriculum presents a general concept of literacy; (c) there is also a fragmented literacy construct that seems to exist; and, (d) for this inquiry, it was necessary to design a composite literacy construct.

Literacy as cross-curricular. In quite a few of the curriculum documents being reviewed, literacy is presented in the front matter of the curriculum as a cross-curricular concept. Although the English program is recognized as being “dedicated to developing the knowledge and skills on which literacy is based” (OMOE, 2007, p. 3), literacy education is also presented as “a communal project” (OMOE, 2007, p. 3). The Arts program cites a literacy report published by the OMOE (2003b) that states, “All teachers of all subjects . . . are teachers of literacy” (as cited in OMOE, 2009, p. 51). Perhaps anticipating the curriculum revisions that would be taking place, the OMOE writes, “the teaching of literacy skills is embedded across the Ontario curriculum” (OMOE, 2007, p. 3). The French as a Second Language (FSL) program states that “literacy involves a range of critical-thinking skills and is essential for learning across the curriculum” (OMOE, 2014b, p. 48). The FSL program also suggests that there are specific “literacy demands” (OMOE, 2014b, p. 48) of each subject area though. The Geography curriculum similarly recognizes that “[l]iteracy instruction takes different forms of emphasis in different subjects, but in all subjects, literacy needs to be explicitly taught” (OMOE, 2013b, pp. 50-51).

A general concept of literacy. The English curriculum offers perhaps the most explicit and generalized literacy construct by saying that literacy is “based” on “knowledge and skills in the areas of listening and speaking, reading, writing, and viewing and representing” (OMOE, 2007, p. 3). It is unclear which knowledges and skills are being considered though. The six skills that are listed in the English curriculum (OMOE, 2007) are not listed in any other curriculum document as an overarching statement about literacy. The mention of “written, oral, and visual communication skills” in the Mathematics curriculum (OMOE, 2005, p. 27) arguably parallels the six skills mentioned in the English curriculum (i.e., speaking, listening, reading, writing, viewing, and representing), but different terms are being used, and they evoke thinking in

different ways. The focus in the Mathematics curriculum, which was published prior to the English curriculum, appears to be on communication. Literacy skills are described in the English curriculum (OMOE, 2007) as “employability skills” (p. 36), and, in the more recently revised curriculum documents, including the History, Geography, French as a Second Language, and Health and Physical Education programs, literacy is considered to be a “determinant of health” (OMOE, 2013a, p. 4, 2013b, p. 3, 2014b, p. 3, 2015b, p. 4).

A fragmented literacy construct. A general concept of literacy is presented in all eight of the curriculum documents being reviewed. However, disciplinary qualifiers or descriptors are also being used to distinguish different types of literacy (e.g., mathematical literacy, scientific literacy, physical literacy). Table B2 presents the types of literacy that are introduced in the curriculum documents being reviewed. I have listed the courses being reviewed that are associated with the programs in which these terms are being introduced. For instance, the term *critical literacy* appears in the peripheral content of seven of the eight curriculum documents being reviewed, with the Mathematics curriculum (OMOE, 2005) being the exception. There is no discussion or use of the term *types of literacy* throughout the Ontario curriculum. This is how I have come to define this fragmented literacy construct.

Table B2. *Types of Literacy Introduced in the Ontario Curriculum Documents Analyzed*

Types of Literacy				
Critical Literacy	Media Literacy	Information Literacy	Mathematical Literacy	Financial Literacy
• English (2007) • Science (2008) • Geography (2013) • French as a Second Language (2014) • Health and Physical Education (2015) • History (2013) • Arts (2009)	• English (2007) • Health and Physical Education (2015) • Arts (2009)	• English (2007) • Geography (2013) • French as a Second Language (2014) • Health and Physical Education (2015) • History (2013) • Arts (2009)	• Mathematics (2005) • English (2007) • Science (2008) • Geography (2013) • Health and Physical Education (2015) • History (2013) • Arts (2009)	• Geography (2013) • French as a Second Language (2014) • Health and Physical Education (2015) • History (2013)
Scientific Literacy	Environmental Literacy	Technological Literacy	Historical Literacy	Spatial Literacy
• Science (2008)	• Science (2008)	• Science (2008)	• History (2013)	• Geography (2013)
French or FSL Literacy	Physical Literacy	Health Literacy	Food Literacy	Game Literacy
• French as a Second Language (2014)	• Health and Physical Education (2015)	• Health and Physical Education (2015)	• Health and Physical Education (2015)	• Health and Physical Education (2015)
Linguistic Literacy	Musical Literacy	Visual Literacy	Arts/Artistic Literacy	Multiple Literacies
• Arts (2009)	• Arts (2009)	• Arts (2009)	• Arts (2009)	• Arts (2009)

Note. The terms *social studies literacy* and *geography literacy* are introduced in the curriculum document containing the Grades 1 to 6 Social Studies program and the Grades 7 and 8 Geography and History programs (OMOE, 2013a). Although these unique types of literacy are introduced in a document being reviewed, these types of literacy are associated with courses that are not included as part of this review. Thus, these types of literacy are not included in the table. *Spatial literacy* is referenced in the peripheral matter of the document that includes the Grade 8 history course (OMOE, 2013); however, this concept is not associated with the history program in particular.

When reading the curriculum, I wondered how all of the types of literacy come together, and I wondered what warrants use of the term *literacy* in each and all of the different contexts in which the term is being used. There is no consistent or comprehensive conceptualization that unifies the many different types of literacy being presented across the Ontario curriculum. Without any clear, consistent, and comprehensive literacy construct, it is difficult to identify what in particular is expected of students as part of their literacy education across multiple courses.

Designing a composite literacy construct. I created a composite construct by compiling ideas that are associated with the term *literacy* in the common curriculum. This developing literacy construct included a general concept of literacy followed by each type of literacy. Any relationships that seemed to be suggested between a concept of literacy and anything else (e.g., well-being, confidence, inquiry and research skills, thinking and learning) were identified. Following this, actions associated with the specific type of literacy were listed. Although the full developing composite construct is not provided, excerpts of the construct that focus on critical literacy are presented in Figure B2 as one example of how this construct came together. This example illustrates how reading across multiple curriculum documents that refer to the same type of literacy can result in a collective composite of what a particular type of literacy entails.

Critical Literacy Relationships

Critical literacy appears to have a relationship with the following concepts:

- Relationship with “higher-level thinking skills” (English, p. 5)
- Relationship with critical thinking (Arts, p. 53, English, p. 110, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38).
- Relationship with metacognition (French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 73, History, p. 52) – an “aspect of critical thinking,” “which involves developing one’s thinking skills by reflecting on one’s own thought processes” (Geography, p. 53)
- Relationship with “advocat[ing] for” oneself “to get the support [one] need[s] in order to achieve [one’s] goals” (French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 73)
- Relationship with “media analysis” (Arts, p. 41)
- Relationship with being “connected to the curriculum; that [students] see themselves in what is taught, how it is taught, and how it applies to the world at large” (Geography, p. 3)
- Relationship with “mov[ing] beyond the amassing of information to an appreciation of the relevance of” the disciplines to one’s life (Geography, p. 53)

- Relationship with “thriv[ing] in an ever-changing global community” (French as a Second Language, p. 3, Geography, p. 3)
- Relationship with being “informed, productive, caring, responsible, healthy, and active citizens in [one’s] own communities and in the world” (Geography, p. 3)

Actions Associated with Critical Literacy

The following actions appear to be associated with a concept of critical literacy:

- “Go[ing] beyond conventional critical thinking” (Arts, p. 53, English, p. 110, History, p. 51)
- “Understand[ing]” what one reads and views “at a deeper level” (English, p. 5)
- “Appreciat[ing]” what one reads and views “at a deeper level” (English, p. 5)
- “Evaluat[ing]” what one reads and views “at a deeper level” (English, p. 5)
- Thinking “critically about what [one is] hearing, reading, and viewing” (French as a Second Language, p. 10)
- “Becom[ing] [a] reflective, critical, independent” learner (English, p. 5)
- “Focusing on issues related to fairness, equity, and social justice” (Arts, p. 53, English, p. 110, Geography, p. 51, History, p. 51, Science, p. 38); “Concern[ing]” oneself with “issues related to fairness, equity, and social justice” (French as a Second Language, p. 49, Health and Physical Education, p. 72); “Look[ing] at issues of power and justice in society” (English, p. 34)
- “Looking beyond the literal meaning” of a text (Arts, p. 53, English, p. 110, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38)
- “Read[ing] for implicit as well as overt meaning” (English, p. 34)
- “Identify[ing] perspectives” (English, p. 34)
- “Identify[ing] [. . .] values” (English, p. 34); “Determining [. . .] the underlying values” (History, p. 37)
- “Identify[ing] [. . .] issues” (English, p. 34)
- “Detect[ing] bias” (English, p. 34); Identifying, Determining, or Assessing “what biases might be contained in” a text “and why that might be” (Arts, p. 53, Science, p. 38)
- “Analy[zing] media messages and determin[ing] what biases might be contained in the texts, media, and resource material and why that might be” (Geography, p. 53); Analyzing “media messages and determin[ing] possible motives and underlying messages” (French as a Second Language, p. 49, Health and Physical Education, p. 73, History, p. 51); “Determin[ing] what biases might be contained in the texts, media, and resource material and why that might be” (French as a Second Language, p. 49, Health and Physical Education, p. 73, History, p. 51); “Critiqu[ing] media messages” (History, p. 37)
- Participating in “media analysis” (Arts, p. 41); Examining “commercial media works” (Arts, p. 41)
- “‘Decoding’ the work – that is, determining the purpose, intended audience, mood, and message of the work, and the techniques used to create it” (Arts, p. 41)
- “Evaluat[ing] everyday media, maintaining a critical distance and resisting manipulation by media producers” (Arts, p. 41)
- “Learn[ing] about media techniques that [one] can then use to create or enhance [one’s] own works” (Arts, p. 41)
- “Recogni[zing] that media construct reality, have commercial implications, contain ideological and value messages, and have social and political implications” (Arts, p. 41)
- “Assess[ing] how fairly the facts have been reported” (Science, p. 38)
- Engaging in “critical analyses” (English, p. 34)
- “[S]ynthesiz[ing] information” (French as a Second Language, p. 3, Geography, p. 3)
- “Asking questions” (English, p. 34)

- “Asking what view of the world the text advances and whether [one] find[s] this view acceptable” (Arts, p. 53, English, p. 111, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51)
- “Determining the intended audience” of a text (History, p. 37)
- “Asking [. . .] who benefits from the text” (Arts, p. 53, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51); “Asking [. . .] how the reader is influenced” (Arts, p. 53, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51); “Understanding the impact on members of society that was intended by the text’s creators” (French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 73); “Determining [. . .] the author’s intentions” (History, p. 37)
- Understanding that “[l]anguage and communication are never neutral: they are used to inform, entertain, persuade, and manipulate” (French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 73, History, p. 52)
- “Assess[ing] [. . .] how the content of” a text “was determined and by whom, and what might have been left out of the [text] and why” (Geography, p. 53, Science, p. 38); “Determin[ing] how the content of” a text “might be determined and by whom, and whose perspectives might have been left out and why” (Arts, p. 53, French as a Second Language, p. 49, Health and Physical Education, p. 73, History, p. 51)
- “Determin[ing] [. . .] whose perspectives might have been left out and why” (Arts, p. 53, Geography, p. 53, Health and Physical Education, p. 73, History, p. 51)
- “Observ[ing]” (English, p. 110) or “Determining” (Arts, p. 53, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38) “what is present and what is missing” (Arts, p. 53, English, p. 110, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38)
- “Be[ing] aware of [. . .] gaps in the text” (Arts, p. 54, Geography, p. 53, History, p. 51); “Be[ing] aware of [. . .] silences in the text” (Arts, p. 54, Geography, p. 53, History, p. 51); “Tak[ing] into account [. . .] gaps in the text” (French as a Second Language, p. 49, Health and Physical Education, p. 72); “Tak[ing] into account [. . .] silences in the text” (French as a Second Language, p. 49, Health and Physical Education, p. 72)
- “Determining [. . .] the missing voices” (History, p. 37)
- Analyzing and evaluating “a text’s complete meaning and the author’s intent” (Arts, p. 53, English, p. 110, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38)
- Becoming “equipped to produce” interpretations (Arts, p. 53, French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 73, History, p. 51, Science, p. 38)
- “Understand[ing] that meaning is not found in texts in isolation. People make sense of a text, or determine what a text means, in a variety of ways” (Arts, p. 54, French as a Second Language, p. 49, Geography, p. 53, Health and Physical Education, p. 72, History, p. 51)
- “Be[ing] aware of points of view” (Arts, p. 54, Geography, p. 53, History, p. 51); “Tak[ing] into account: points of view” (French as a Second Language, p. 49, Health and Physical Education, p. 72)
- “Be[ing] aware of” context(s) (Arts, p. 54, Geography, p. 53, History, p. 51); “Tak[ing] into account [. . .] context” (French as a Second Language, p. 49, Health and Physical Education, p. 72)
- “Be[ing] aware of [. . .] the background of the person interacting with the text” (Arts, p. 54, Geography, p. 53, History, p. 51); “Tak[ing] into account [. . .] the background of the person interacting with the text” (French as a Second Language, p. 49, Health and Physical Education, p. 72)
- “Be[ing] aware of [. . .] intertextuality” (Arts, p. 54, Geography, p. 53, History, p. 51); “Tak[ing] into account [. . .] intertextuality” (French as a Second Language, p. 49, Health and Physical Education, p. 72)
- ‘Understanding self, other, and world’ (English, p. 5)

- “Adopt[ing] a critical stance” (Arts, p. 53, English, pp. 34, 111, French as a Second Language, p. 49, Geography, p. 52, Health and Physical Education, p. 72, History, p. 51, Science, p. 38)
- “Express[ing]” oneself and “speak[ing] out about issues that strongly affect” oneself (English, p. 34)
- “[C]ommunicat[ing] effectively” (French as a Second Language, p. 3, Geography, p. 3)
- “Develop[ing] alternative illustrations for advertisements or fiction texts that use colour or angle of view to modify the message (e.g., a spoof advertisement criticizing commercial propaganda) or to show a different point of view” (Arts, p. 42)
- “Us[ing] drama conventions to bring to life the motivations of minor characters who have other perspectives on the story” (Arts, p. 42)
- “Analy[zing] art works and texts to identify possible meanings” (Arts, p. 53)
- “Challenging the status quo” (English, p. 34)
- “Explor[ing] the social and emotional impact of bullying, violence, and discrimination in the form of racism, sexism, or homophobia on individuals and families” (English, p. 34)
- Linking understandings of “the social and emotional impact of bullying, violence, and discrimination in the form of racism, sexism, or homophobia on individuals and families” and a “school’s antibullying and violence-prevention programming” (English, p. 34)
- “Read[ing] or view[ing] reports from a variety of sources on a common issue” (Science, p. 38)
- “Analy[zing] a variety of primary and secondary sources, [. . .] interpreting information and assessing the strength of various positions on issues related to [. . .] history” (History, p. 37)
- “Engag[ing] in a critical discussion of ‘texts,’ which can include books (including textbooks), television programs, movies, web pages, advertising, music, gestures, oral texts, visual art works, maps, graphs, graphic texts, and other means of expression” (Geography, p. 53); “Engag[ing] in a critical discussion of ‘texts’” (Arts, pp. 53-54, French as a Second Language, p. 49, Health and Physical Education, p. 73, History, p. 51)
- Reflecting on “thinking, ensuring, for example, that their questions are appropriate, that they have logically interpreted the information they have generated, and that the appropriate concepts of disciplinary thinking are reflected in their analysis” (Geography, p. 53, History, p. 52)
- Engaging in “critical thinking” requires asking oneself “effective questions in order to: interpret information; analy[ze] situations; detect bias in their sources; determine why a source might express a particular bias; examine the opinions, perspectives, and values of various groups and individuals; look for implied meaning; and use the information gathered to form a personal opinion or stance, or a personal plan of action with regard to making a difference” (Health and Physical Education, p. 72)
- Engaging in “critical thinking” and metacognitive thinking means “revisit[ing] and rethink[ing] [one’s] work, leading to a deepening of the inquiry process” (Geography, p. 53, History, p. 52)
- Making “informed decisions” (French as a Second Language, p. 3, Geography, p. 3)

Figure B2. An Excerpt of the Developing Composite Literacy Construct for Ontario Education: Critical Literacy

Note. Sources for the curriculum documents referenced: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); and Science (OMOE, 2008).

When reading the curriculum, it was not always clear what an individual is expected to possess in terms of particular knowledges and skills or how literate identities function. It was much more apparent which actions could be understood as being reflective of a form of engagement that requires and reflects particular knowledges and skills.

Supplementary Documents (Phase 3: Construct Expansion/Enrichment)

One of the challenges of working with the Ontario curriculum is that the curriculum extends textually beyond the official curriculum documents. The curriculum documents being analyzed include references to reports and resources that the OMOE has published to supplement the curriculum. Given that these supplementary documents are intended to be paired with and read alongside the curriculum documents, as part of this construct analysis process, I consulted some of the supplementary documents to potentially expand and enrich my readings of the curriculum. A few of the supplementary documents that were consulted were the *Think Literacy* documents (OMOE, 2003b, 2003c, 2004-2005), the report, *Leading Math Success: Mathematical Literacy, Grades 7-12* (OMOE, 2004), and a series of financial literacy documents, including the report, *A Sound Investment* (OMOE, 2010a) and the accompanying resource guides (OMOE, 2011c, 2011d). The following is a brief discussion of how each of these supplemental resources relate to the present inquiry.

Think Literacy (2003-2005). A report from an expert panel entitled, *Think Literacy Success* (OMOE, 2003c), and a *Think Literacy* (OMOE, 2003b) resource document was “developed by teachers for teachers of all subjects who have students who are struggling with literacy skills” (OMOE, 2003b, para. 1). Accompanying this general resource document is a collection of *Think Literacy* resources published between 2004 and 2005 (see OMOE, 2004-2005), which include subject-specific examples for each program. The decreasing references to these resources across the Ontario curriculum suggests that these documents have become less relevant over time. They are currently not relevant enough to be referenced at all in the most recently revised curriculum.

Leading Math Success: Mathematical Literacy, Grades 7-12 (2004). The *Leading Math Success* document is only cited in the Mathematics curriculum (OMOE, 2005). The definition of mathematical literacy offered in this report is not included in the Mathematics curriculum document though. The term *mathematical literacy* is introduced in the Mathematics curriculum on one occasion, but the term is not defined or elaborated upon conceptually:

Students should be made aware that mathematical literacy and problem solving are valuable assets in an ever-widening range of jobs and careers in today’s society. The knowledge and skills students acquire in mathematics courses are useful in fields such as science, business, engineering, and computer studies; in the hospitality, recreation, and tourism industries; and in the technical trades. (OMOE, 2005, p. 28)

Although the term *mathematical literacy* remains undefined in the Mathematics curriculum, six out of the seven other curriculum documents being reviewed in the current construct analysis use the term *mathematical literacy*. The French as a Second Language curriculum (OMOE, 2014b) is the one exception. Literacy concepts that are attributed value in supplementary documents need to be echoed throughout the curricula they relate to rather than being imposed onto the curriculum as an interpretive possibility.

Financial Literacy (2010-2011). The more recently revised curriculum documents, including Geography (OMOE, 2013b), History (OMOE, 2013a), French as a Second Language (OMOE, 2014b), and Health and Physical Education (OMOE, 2015b), all include a section on financial literacy. In each of these four curriculum documents, the section on financial literacy begins with a vision of financial literacy that is quoted from the Ministry's document, *A Sound Investment: Financial Literacy Education in Ontario Schools* (OMOE, 2010a). The vision is followed by an expanded discussion of financial literacy education and how it relates to the demands of "the global economy," "a complex and fast-changing financial world," and "the modern world" (OMOE, Health and Physical Education, 2015b, p. 69). The curriculum documents also each include a paragraph to explain how financial literacy relates to the particular program in question followed by a paragraph introducing a financial literacy resource document.

In the financial literacy resource guides (OMOE, 2011c, 2011d), expectations from each course that relate to financial literacy are listed. The purpose of these resource documents is to identify opportunities that already exist in the curriculum in which students' financial literacy skills could be developed and/or used. The learning expectations of the curriculum are not explicitly being rewritten to include any language that has come to be explicitly associated with financial literacy though. The re-presentation of the learning expectations in this collection of supplementary resources is arguably a form of rewriting the curriculum such that it can be read and interpreted through an alternative and specialized literacy lens. It is unclear whether or not assessment and evaluation practices are expected to include any judgement on whether or not financial literacy, as it is now being conceptualized, was demonstrated in the process of achieving a particular expectation or set of expectations. Thus, for the current inquiry, only the explicit language of what is expected of students as written in the curriculum expectations is being considered relevant to the measurement context in question.

Unaltered construct. The supplementary resources illustrate how the OMOE intends literacy to be a cross-curricular concept, and they illustrate how particular types of literacy are related to multiple disciplines. These resources explain how an array of curriculum expectations could potentially be interpreted were a particular literacy lens to be applied. Rather than changing the curriculum though, the supplementary resources make connections between what is expected and how those expectations come together to form a construct of what one version of literacy education could look like. For the current analysis, I focused primarily on mapping the content in the curriculum documents, and I used the supplementary documents to broaden my understandings. It is important to consider that the definitions and ideas presented in the supplementary resources did not make it into the body of the official curriculum documents. The OMOE could have integrated the thinking about literacies expressed in the supplementary resources in the sections of the curriculum that introduce concepts of literacy and also throughout the curriculum expectations. The construct presented in this chapter forms the basis of a strong argument of what is explicitly articulated in the framing of the curriculum documents and what is explicitly carried through the curriculum expectations. If an argument for underrepresentation can be made based on this explicit mapping, it could be further expanded to include even more complex interpretations of the curriculum.

Developing an Expected Literacies Construct (Phase 4: Construct Refinement)

Throughout this phase, I sought to understand how the concepts, the theories, the values, and the objectives associated with literacy that are presented in the framing of the curriculum are integrated into the expectations of the courses that form the common curriculum. This remapping of the literacy construct meant eliminating any item from the construct that could not be observed explicitly in the curriculum expectations. Although explicit matches were desired with regards to the language used in the peripheral matter and the language used in the course expectations, when an explicit match could not be found, I also included expressions found in the expectations that might convey or evoke a similar idea. The expected literacy construct, which was the result of this mapping process, highlights only the aspects of the construct that are explicitly expected of students.

An excerpt from the expected literacy construct showing the refined version of the critical literacy section of the construct is presented in Table B3. Only one instance of a curriculum expectation was required to warrant inclusion of a literacy-associated action in the expected

literacy construct. Thus, once an item was found in any of the relevant courses that was accepted as being sufficiently related, the search for additional possible references ceased. In the cases where a pair of unique expectations was required to show that a common expectation is held for all students, such as from across two streamed courses, multiple expectations are listed. An overview of the expected construct was presented in Phase 1 (see Table B1), and the full construct was used in the comparative mapping of the curriculum and the test (see Appendix C).

Table B3. *An Excerpt of the Expected Literacy Construct for Ontario Education: Critical Literacy*

Critical Literacy		
Expected Literacy-Associated Actions (Derived from the peripheral matter of the curriculum; One example listed)	Course	Curriculum Strand and Expectation(s)
“Becom[ing] [a] reflective, critical, independent” learner (English, p. 5)	English	Media Studies: 4. Reflecting on Skills and Strategies
“Focusing on issues related to [. . .] social justice” (Arts, p. 53)	Arts	Dance: A1.2
“Concern[ing]” oneself with “issues related to fairness [. . .]” (Health and Physical Education, p. 72)	Health and Physical Education	Movement Competence: Skills, Concepts, and Strategies: B2.1
“Identify[ing] perspectives” (English, p. 34)	English	Reading and Literature Studies: 1.8. Critical Literacy
“Identify[ing] [. . .] values” (English, p. 34)	English	Writing: 2.5. Critical Literacy
“Identify[ing] [. . .] issues” (English, p. 34)	English	Oral Communication: 1.7. Analy[z]ing Texts
Identifying biases (Science, p. 38)	Science	Scientific Investigation Skills and Career Exploration: A1.8. Analy[z]ing and Interpreting
‘Decoding’ art works including “the message of the work, and the techniques used to create it” (Arts, p. 41)	Arts	Visual Arts: D2.1; D2.2
“[L]earn[ing] about media techniques” (Arts, p. 41)	Arts	Drama: B3.1
“Assess[ing] how fairly the facts have been reported” (Science, p. 38)	Science	Scientific Investigation Skills and Career Exploration: A1.9. Analy[z]ing and Interpreting
“[S]ynthesiz[ing] information” (Geography, p. 3)	Geography	Geographic Inquiry and Skill Development: A1.6
“Asking questions” (English, p. 34)	English	Oral Communication: 1.8. Critical Literacy [comment on issues ‘raised’]
“Determining the intended audience” of a text (History, p. 37)	History	Creating Canada, 1850-1890: A2.6

Note. Sources for the curriculum documents: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); and Science (OMOE, 2008).

APPENDIX C: A Comparative Mapping of the Curriculum and the Test

The left-most column of the mapping presents the full expected literacy construct that has been developed for this study based on the Ontario curriculum (see Table C1). One instance of a curriculum document is noted alongside each item indicating one source of a particular expression or conceptualization of literacy. The middle column of the table presents one example of a curriculum expectation to demonstrate why inclusion of a particular expression found in the peripheral matter of the curriculum warrants inclusion in the expected literacy construct. Only the literacy-associated actions that are explicitly expected on students are included in this construct, since this construct corresponds with the measurement context. The right-most column shows how the test construct relates to the curriculum construct. I have identified which part or parts of the test's literacy construct relate to each item in the expected literacy construct. When 'All skills listed' is noted, this means that all skills listed under the identified category of the test construct are related to the expected literacy-associated action in the curriculum construct.

Table C1. *A Comparative Mapping of the Curriculum and the Test*

Expected Literacy Construct: Literacy-Associated Action (Derived from peripheral matter of the curriculum; One example listed)	Evidence Warranting Inclusion in Construct (Course, Curriculum Strand, and Expectation(s))	OSSLT Construct Category and Example of an OSSLT Skill
Literacy (General)		
Using oral communication skills (Mathematics, p. 27)	Mathematics - Mathematical Process Expectations: Communicating	Not Represented
Listening (English, p. 3)	English - Oral Communication: 1. Listening to Understand	Not Represented
Speaking (French as a Second Language, p. 48)	French as a Second Language - Speaking: B1. Speaking to Communicate	Not Represented
"[D]iscussing" (Arts, p. 51)	Arts - Drama: B1.3	Not Represented
Reading (English, p. 3)	English - Reading and Literature Studies: 1. Reading for Meaning	Reading Skills: All skills listed
Writing (English, p. 3)	English - Writing: 2.4. Sentence Craft and Fluency	Writing Skills: All skills listed
Using written communication skills (Mathematics, p. 27)	Mathematics - Mathematical Process Expectations: Communicating	Writing Skills: All skills listed
Supporting opinions (English, p. 3)	English – Reading and Literature Studies: 1.7. Evaluating Texts	Writing Skills – Developing and Supporting a Main Idea: All Skills Listed – <i>Except for the item from the Technical Report – "developing main idea" – since no 'support' listed as being required explicitly</i>
Engaging with diverse texts (History, p. 48)	History – Creating Canada, 1850-1890: A2.2	Reading Skills – Engaging With Texts: All skills listed; Writing Skills – Writing Different Types of Texts: All skills listed

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Using visual communication skills (Mathematics, p. 27)	Mathematics – Mathematical Process Expectations: Communicating	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3); Writing Skills – Writing Different Types of Texts: Writing “a news report based on the picture and headline provided” (EQAO, 2016e, p. 15); Writing “a news report based on the picture and headline provided” (EQAO, 2016e, p. 15); Writing a news report that “is related to the picture and headline” (EQAO, 2016e, p. 15)
Representing (Geography, p. 51)	Geography – Geographic Inquiry and Skill Development: A1.2 <i>* Focus is on digital representations in front matter, but sources and multiple perspectives in expectation</i>	Not Represented
Focusing on purpose and audience (English, p. 3)	English - Writing: 1.1. Identifying Topic, Purpose, and Audience	Writing Skills – Communicating: “[C]ommunicating in a variety of forms, and for a range of purposes and audiences” (EQAO, 2011f, p. 2)
Understanding “language and its structure” (French as a Second Language, pp. 35-36)	French as a Second Language - Writing: D1.3. (Academic)/ D1.4. (Applied) Applying Language Structures	∴
Using language with “precision” (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.13. Communicating	Writing Skills – Attending to Conventions: Demonstrating correct “use” or “control of conventions” (EQAO, 2015i, Scoring Guide for Long Writing Conventions: Section IV; see also EQAO, 2014f, Scoring Guide for Long Writing Conventions: Section I)
Expressing oneself (French as a Second Language, p. 48)	French as a Second Language - Speaking: B1.1. Using Oral Communication	Writing Skills – Presenting Ideas and Opinions: “[E]xpressing an opinion” through a “series of paragraphs” (EQAO, 2011f, p. 1)
Expressing thoughts (ideas) and feelings (Arts, p. 51)	Arts - Visual Arts: D1.1	Writing Skills – Presenting Ideas and Opinions: “[E]xpressing an opinion” through a “series of paragraphs” (EQAO, 2011f, p. 1)
Communicating (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.11. Communicating	Writing Skills – Communicating: All skills listed

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[C]ommunicating with words and with the body” (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills * <i>Verbal and non-verbal</i>	Not Represented
Practicing movement (Health and Physical Education, p. 71)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B1.4	Not Represented
Improving “effectiveness of the action” (Health and Physical Education, p. 71)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.3 * <i>Chances for success</i>	Not Represented
“[A]djust[ing]” (Health and Physical Education, p. 71)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills * <i>Communication to suit audiences</i>	Not Represented
“[A]pply[ing] metacognitive knowledge and skills” (French as a Second Language, p. 48)	French as a Second Language - Reading: C2.3. Metacognition	Not Represented
Reflecting (Arts, p. 52)	Arts - Visual Arts: D2. Reflecting, Responding, and Analy[z]ing	Not Represented
Using discipline-specific skills (Science, p. 39)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	∴
Understanding discipline-specific language, vocabulary, terminology (Science, pp. 39, 40)	Science - Biology: Sustainable Ecosystems (Academic) / Biology: Sustainable Ecosystems and Human Activity (Applied): B2.1	∴
“[C]onnecting learning to past experiences” (French as a Second Language, p. 48)	French as a Second Language - Reading: C3.1. Intercultural Awareness	Reading Skills – Making Connections: All skills listed
Developing an understanding of concepts (Arts, p. 51)	Arts - Music – Fundamental Concepts	Not Represented
Developing strategies to understand texts (French as a Second Language, p. 48)	French as a Second Language - Listening: A1. Listening to Understand	Not Represented
Developing strategies to talk about texts (French as a Second Language, p. 48)	French as a Second Language - Speaking: B1. Speaking to Communicate	Not Represented
Developing strategies to write about texts (French as a Second Language, p. 48)	French as a Second Language - Writing: D2.1. Generating, Developing, and Organizing Content	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Communicating understanding (Arts, p. 51)	Arts - Dance: A2. Reflecting, Responding, and Analy[z]ing	Reading Skills – Understanding Texts: “[I]ndicat[ing] [. . .] reading comprehension” (EQAO, 2015i, Scoring Guide for Reading Open Response: Section I and V; see also EQAO, 2014f, Scoring Guide for Reading Open Response: Section IV, Q6 and 7); “[D]emonstrat[ing] [an] understanding of explicit (directly stated) and implicit (indirectly stated) meanings” (EQAO, 2011f, p. 1)
Developing “thinking skills” (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	Not Represented
Developing and using “critical thinking skills” (Health and Physical Education, p. 70); Thinking critically (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	Not Represented
Thinking “creatively” (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴
Selecting “appropriate methods” (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.6. Performing and Recording	Not Represented
Conducting inquiries; Planning investigations; Carrying out investigations (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Not Represented
Participating in inquiry (History, p. 49)	History - Creating Canada, 1850-1890: A2. Inquiry	Not Represented
Exploring/Determining solutions (Arts, p. 53)	Arts - Visual Arts: D1.4	∴
Solving problems (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴
Asking questions (History, p. 49)	History - Creating Canada, 1850-1890: A2.1	Not Represented
Using questioning to “shap[e] the direction of an investigation” (History, p. 49)	History - Creating Canada, 1850-1890: A2.1	Not Represented
Recording observations (Mathematics, p. 27)	Mathematics - Linear Relations: Using Data Management to Investigate Relationships (Item 3)	Not Represented
Explaining reasoning (Mathematics, p. 27)	Mathematics - Mathematical Process Expectations: Reasoning and Proving, Communicating	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Applying reasoning (Health and Physical Education, p. 71)	Health and Physical Education - Healthy Living: C2. Making Healthy Choices	Writing Skills – Developing and Supporting a Main Idea: Writing a series of paragraphs expressing an opinion and “adequately support the opinion with reasons, examples, or facts” (EQAO, 2016e, p. 17)
“[L]ocat[ing]” information (English, p. 34)	English - Writing: 1.3. Research	Reading Skills – Engaging With Texts: “[P]rovid[ing] [. . .] ideas and information from the reading selection” (EQAO, 2015i, Scoring Guide for Reading Open Response: Section I and V; see also EQAO, 2014f, Scoring Guide for Reading Open Response: Section IV, Q6 and 7)
Using a variety of sources (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.7. Initiating and Planning	Not Represented
Interpreting symbols (Arts, p. 52)	Arts - Visual Arts: D2.3	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
Analyzing (Science, p. 39)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Reading Skills – Understanding Implicitly Stated Information and Ideas: “[C]onnect[ing] ideas from different parts of a text and mak[ing] conclusions” (EQAO, 2015n)
“[E]valuat[ing]” information (OMOE, 2008, <i>Reach Every Student</i> , p. 6, as cited in Geography, p. 50)	Geography - Geographic Inquiry and Skill Development: A1.5	Reading Skills – Making Connections: “[C]onnect[ing] ideas from a text to [one’s] own ideas to interpret and make judgments about what the text is saying” (EQAO, 2015n)
Evaluating the effectiveness of texts (English, p. 34)	English - Reading and Literature Studies: 1.7 Evaluating Texts	∴
Assessing the “reliability” of sources (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.9. Analy[z]ing and Interpreting	Not Represented
“[C]hoosing strategies appropriate to the particular text form” (History, p. 49)	History - Canada, 1890-1914: A Changing Society: B2.6	∴
‘Sending, receiving, and interpreting information without speaking’ (Health and Physical Education, p. 71)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills * <i>Non-verbal communication</i>	∴

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Presenting ideas/findings (Science, p. 39)	Science - Scientific Investigation Skills and Career Exploration: A1.11. Communicating	Writing Skills – Presenting Ideas and Opinions: All skills listed
Justifying results (Mathematics, p. 27)	Mathematics - Mathematical Process Expectations: Reasoning and Proving	Not Represented
Offering critiques (Arts, p. 51)	Arts - Visual Arts: D2.4 * <i>Of / for oneself</i>	Not Represented
Addressing “issues of fairness, equity, and social justice” (Arts, p. 51, Health and Physical Education, p. 70)	Arts - Dance: A1.2 (Social justice); Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.1 * <i>Fairness</i>	Not Represented
‘Defining thoughts about oneself, others, and the world’ (French as a Second Language, p. 36)	French as a Second Language - Reading: C3.1 Intercultural Awareness	Not Represented
Developing identity (English, p. 34)	English - Media Studies: 1.5. Critical Literacy	Not Represented
Critical Literacy		
“[B]ecom[ing] [a] reflective, critical, independent” learner (English, p. 5)	English - Media Studies: 4. Reflecting on Skills and Strategies	Not Represented
“[F]ocusing on issues related to [. . .] social justice” (Arts, p. 53)	Arts - Dance: A1.2	Not Represented
Concerning oneself with “issues related to fairness [. . .]” (Health and Physical Education, p. 72)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.1	Not Represented
“[I]dentify[ing] perspectives” (English, p. 34)	English - Reading and Literature Studies: 1.8. Critical Literacy	∴
“[I]dentify[ing] [. . .] values” (English, p. 34)	English - Writing: 2.5. Critical Literacy	∴
“[I]dentify[ing] [. . .] issues” (English, p. 34)	English - Oral Communication: 1.7. Analy[z]ing Texts	∴
Identifying biases (Science, p. 38)	Science - Scientific Investigation Skills and Career Exploration: A1.8. Analy[z]ing and Interpreting	∴
‘Decoding’ art works including “the message of the work, and the techniques used to create it” (Arts, p. 41)	Arts - Visual Arts: D2.1, D2.2	Not Represented
“[L]earn[ing] about media techniques” (Arts, p. 41)	Arts - Drama: B3.1	Not Represented
“[A]ssess[ing] how fairly the facts have been reported” (Science, p. 38)	Science - Scientific Investigation Skills and Career Exploration: A1.9. Analy[z]ing and Interpreting	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[S]ynthesiz[ing] information” (Geography, p. 3)	Geography - Geographic Inquiry and Skill Development: A1.6	∴
“[A]sking questions” (English, p. 34)	English - Oral Communication: 1.8. Critical Literacy * <i>Commenting on issues ‘raised’</i>	Not Represented
“[D]etermining the intended audience” of a text (History, p. 37)	History - Creating Canada, 1850-1890: A2.6	∴
“[A]sking [. . .] who benefits from the text” (Health and Physical Education, p. 72)	Health and Physical Education - Healthy Living: C3.3. Human Development and Sexual Health	Not Represented
“[A]sking [. . .] how the reader is influenced” (Geography, p. 52, Health and Physical Education, p. 72); “[U]nderstand[ing] the impact on members of society that was intended by the text’s creators” (Geography, p. 53, Health and Physical Education, p. 73)	Health and Physical Education - Active Living: A1.3 * <i>Understanding influential factors and motivation</i> ; Geography - Changing Populations: D2.3 (Academic) / Liveable Communities: E2.4 (Applied)	Not Represented
Interpreting (Science, p. 38)	Science - Scientific Investigation Skills and Career Exploration: A1.8. Analyz[ing] and Interpreting	Reading Skills – Making Connections: “[M]aking connections between information and ideas in a reading selection and personal knowledge and experience (interpreting reading selections by integrating information and ideas in a reading selection and personal knowledge and experience)” (EQAO, 2011f, p. 2); “[C]onnect[ing] ideas from a text to [one’s] own ideas to interpret and make judgments about what the text is saying” (EQAO, 2015n)
“[B]e[ing] aware of points of view” (Geography, p. 53)	Geography - Geographic Inquiry and Skill Development: A1.3	Not Represented
“[B]e[ing] aware of” context(s) (Geography, p. 53)	Geography - Geographic Inquiry and Skill Development: A2. Developing Transferable Skills	Not Represented
‘Understanding self, other, and world’ (English, p. 5)	English - Oral Communication: 1.6. Extending Understanding of Texts	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[C]ommunicat[ing] effectively” (French as a Second Language, p. 3)	French as a Second Language - Speaking: B1.1 Using Oral Communication Strategies	Writing Skills – Communicating: “[C]ommunicat[ing] ideas and information clearly and coherently” (EQAO, 2011f, p. 1); Writing Skills – Organizing Information and Ideas: All skills listed; Writing Skills – Attending to Conventions: All skills listed
Using “drama conventions” to communicate multiple perspectives (Arts, p. 42)	Arts - Drama: B1. Creating and Presenting	Not Represented
“[A]naly[zing] art works and texts to identify possible meanings” (Arts, p. 53)	Arts - Visual Arts: D2.3	Not Represented
Working with “a variety of sources on a common issue” (Science, p. 38)	Science - Scientific Investigation Skills and Career Exploration: A1.6, A1.7. Performing and Recording	Not Represented
“[A]naly[zing] a variety of primary and secondary sources, [. . .] interpreting information [. . .]” (History, p. 37)	History - Canada, 1890-1914: A Changing Society: B2.2, B2.4 <i>* Refers to investigating multiple perspectives using sources, not analyzing explicitly as the focus</i>	Not Represented
Information Literacy		
Working with “digital, print, and visual resources for projects” (History, p. 53)	History - Creating Canada, 1850-1890: A2.3	Not Represented
“[D]esign[ing] [inquiry] questions” for discipline-specific inquiries (History, p. 53)	History - Creating Canada, 1850-1890: A2.1	Not Represented
“[L]ocat[ing]” information (English, p. 35)	English - Writing: 1.3. Research	Reading Skills – Engaging With Texts: “[P]rovid[ing] [. . .] ideas and information from the reading selection” (EQAO, 2015i, Scoring Guide for Reading Open Response: Section I and V; see also EQAO, 2014f, Scoring Guide for Reading Open Response: Section IV, Q6 and 7)
“[S]elect[ing]” information (English, p. 35)	English - Writing: 1.3. Research	Not Represented
“[G]ather[ing]” information (History, p. 52)	History - Creating Canada, 1850-1890: A2.2	Not Represented
“[P]rocess[ing]” information (Geography, p. 54)	Geography - Geographic Inquiry and Skill Development: A1. Geographic Inquiry	∴
“[C]ritically evaluat[ing]” information (English, p. 35)	English - Media Studies: 1.3. Evaluating Texts	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[C]ommunicat[ing] information” (English, p. 35)	English - Oral Communication: 2. Speaking to Communicate	Writing Skills – Communicating: “[C]ommunicat[ing] ideas and information clearly and coherently” (EQAO, 2011f, p. 1); Writing Skills – Presenting Ideas and Opinions: Writing a news report that “contains sufficient and specific information and facts related to the event” (EQAO, 2016e, p. 15)
Communicating “findings for different audiences, using a variety of formats [. . .]” (Geography, p. 54)	Geography - Geographic Inquiry and Skill Development: A1.7	Not Represented
“[C]reat[ing] and produc[ing] art works in dance, drama, music, and the visual arts, including media/multimedia works [. . .]” (Arts, p. 56)	Arts - Dance: A1. Creating and Presenting	Not Represented
Using information to “explore and investigate issues” (Arts, p. 55)	Arts - Drama: B1.1	Not Represented
Using information to “make decisions” (Health and Physical Education, p. 74)	Health and Physical Education - Healthy Living: C2.4. Human Development and Sexual Health	Not Represented
Using information to “create personal meaning” (English, p. 35)	English - Writing: 1.2. Generating and Developing Ideas	Reading Skills – Making Connections: “[C]omparing and contrasting the ideas presented in texts and drawing upon [one’s] own knowledge and experience gained from other texts [one has] read and the world around them” (W. T. Rogers, 2013, p. 10); “[C]onnect[ing] ideas from a text to [one’s] own ideas to interpret and make judgments about what the text is saying” (EQAO, 2015n); Reading Skills – Constructing Meaning: “[C]onstruct[ing] meaning from” texts (EQAO, 2011f, p. 1)
Media Literacy		
Developing “informed and critical understandings” of “the techniques used” by the media (English, p. 115)	English - Media Studies: 2. Understanding Media Forms, Conventions, and Techniques	Not Represented
Recognizing “media contain beliefs and values” (English, p. 115)	English - Media Studies: 1.5. Critical Literacy	Not Represented
Recognizing “[e]ach person interprets messages differently” (English, p. 115)	English - Media Studies: 1.4. Audience Responses	Not Represented
Recognizing “media have special interests (commercial, ideological, political)” (English, p. 115)	English - Media Studies: 1.6. Production and Perspectives	Not Represented
Recognizing “[e]ach medium has its own [. . .] form, techniques, conventions [. . .]” (English, p. 115)	English - Media Studies: 2. Understanding Media Forms, Conventions, and Techniques	Not Represented
Mathematical Literacy		

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[U]sing diagrams, tables, graphs, calculations, and equations to represent quantitative data” (Science, p. 40)	Science - Scientific Investigation Skills and Career Exploration: A1.6. Performing and Recording, A1.12. Communicating	Not Represented
Reading graphs (History, p. 49)	History - Canada, 1890-1914: A Changing Society: B2.4	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
“[I]nterpreting data from various types of maps” (Geography, p. 51)	Geography - Geographic Inquiry and Skill Development: A1.2	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
Using calculations (Geography, p. 51)	Geography - Geographic Inquiry and Skill Development: A2.1	Not Represented
“[T]racking changes” (in fitness, food intake, etc.) (Health and Physical Education, p. 74)	Health and Physical Education - Active Living: A2.3	Not Represented
Financial Literacy		
“[I]nvestigat[ing] the impact of economic factors” (History, p. 47)	History - Creating Canada, 1850-1890: A3.3	Not Represented
“[E]xplor[ing] how different communities responded to or were affected by these factors” (History, p. 47)	History - Creating Canada, 1850-1890: A3.3	Not Represented
Analyzing “the risks that accompany various financial choices” (Health and Physical Education, p. 69)	Health and Physical Education - Health Living: C1.3. Substance Use, Addictions, and Related Behaviours <i>* Not identified as financial choices explicitly</i>	Not Represented
Considering consumer “choices that affect [one’s] health and well-being” (Health and Physical Education, p. 69)	Health and Physical Education - Health Living: C1.3. Substance Use, Addictions, and Related Behaviours <i>* Not identified as consumer choices explicitly</i>	Not Represented
Scientific Literacy		
Understanding “what scientists, engineers, and technologists do as individuals and as a community” (Science, p. 4)	Science - Scientific Investigation Skills and Career Exploration: A2. Career Exploration	Not Represented
Understanding “how scientific knowledge is generated [. . .]” (Science, p. 4)	Science - Biology: Sustainable Ecosystems (Academic) / Biology: Sustainable Ecosystems and Human Activity (Applied): B2.5	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Understanding “what benefits, costs [. . .] are involved in using” scientific knowledge (Science, p. 4)	Science - Earth and Space Science: The Study of the Universe (Academic) / Space Exploration (Applied): D1. Relating Science to Technology, Society, and the Environment	Not Represented
Understanding “how science interacts with technology, society, and the environment” (Science, p. 4)	Science - Earth and Space Science: The Study of the Universe (Academic) / Space Exploration (Applied): D1. Relating Science to Technology, Society, and the Environment; Science - Physics: The Characteristics of Electricity (Academic) / Electrical Applications (Applied): E1. Relating Science to Technology, Society, and the Environment	Not Represented
Initiating and planning (Science, pp. 17, 19)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Not Represented
“Identify[ing] problems/issues to explore” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.1. Initiating and Planning	Not Represented
“Formulat[ing] questions” (Science, p. 20); “[F]ormulating questions or hypotheses” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.1. Initiating and Planning	Not Represented
“Mak[ing] predictions, develop[ing] hypotheses” (Science, p. 20); “[M]aking predictions about ideas, issues, problems [. . .]” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.1. Initiating and Planning	Not Represented
“[P]lanning investigations to answer those questions or test those hypotheses” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Not Represented
“Identify[ing] and locat[ing] research sources” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.3. Initiating and Planning	Not Represented
“Select[ing] instruments and materials” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.2. Initiating and Planning	Not Represented
“Plan[ning] for safe practices in investigation” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.4. Initiating and Planning	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Performing and recording (Science, pp. 17, 19)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Not Represented
“[C]onducting research by gathering, organizing, and recording information” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.5, A1.6. Performing and Recording	Not Represented
“[S]afely conducting inquiries to make observations and to collect, organize, and record data” (Science, p. 19); “Conduct[ing] inquiries safely” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.5. Performing and Recording	Not Represented
“Observ[ing] and record[ing] observations” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.5, A1.6. Performing and Recording	Not Represented
“Us[ing] equipment, materials, and technology accurately and safely” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.5. Performing and Recording	Not Represented
“Control[ling] variables as appropriate” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.5. Performing and Recording	Not Represented
“Adapt[ing] or extend[ing] procedures” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.5. Performing and Recording	Not Represented
“Gather[ing], organiz[ing], and record[ing] relevant information from research and data from inquiries” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.6, A1.7. Performing and Recording	Not Represented
“Acknowledg[ing] sources us[ing] an accepted form of documentation” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.7. Performing and Recording	Not Represented
Analyzing and interpreting (Science, pp. 17, 19)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Reading Skills – Making Connections: “[M]aking connections between information and ideas in a reading selection and personal knowledge and experience (interpreting reading selections by integrating information and ideas in a reading selection and personal knowledge and experience)” (EQAO, 2011f, p. 2); “[C]onnect[ing] ideas from a text to [one’s] own ideas to interpret and make judgments about what the text is saying” (EQAO, 2015n)

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[A]naly[z]ing data or information in order to draw or justify conclusions” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.8, A1.10. Analy[z]ing and Interpreting	Reading Skills – Understanding Implicitly Stated Information and Ideas: “[C]onnect[ing] ideas from different parts of a text and mak[ing] conclusions” (EQAO, 2015n)
“Evaluat[ing] reliability of data and information” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.9. Analy[z]ing and Interpreting	Not Represented
“Evaluat[ing] whether data supports or refutes hypotheses/predictions” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.8. Analy[z]ing and Interpreting	Not Represented
“Interpret[ing] data / information to identify patterns and relationships” (Science, p. 20)	Science - Chemistry: Atoms, Elements, and Compounds (Academic): C3.5 / Exploring Matter (Applied): C3.6, Science - Earth and Space Science: The Study of the Universe (Academic): D2.2 / Space Exploration (Applied): D2.3	Not Represented
“Draw[ing] conclusions” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.10. Analy[z]ing and Interpreting	Reading Skills – Understanding Implicitly Stated Information and Ideas: “[C]onnect[ing] ideas from different parts of a text and mak[ing] conclusions” (EQAO, 2015n)
“Justify[ing] conclusions” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.10. Analy[z]ing and Interpreting	∴
“Identify[ing] sources of error or bias” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.8. Analy[z]ing and Interpreting	Not Represented
Communicating (Science, pp. 17, 19)	Science - Scientific Investigation Skills and Career Exploration: A1. Scientific Investigation Skills	Writing Skills – Communicating: All skills listed
“Communicat[ing] ideas, procedures, and results in a variety of forms” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.11. Communicating	Not Represented
“Us[ing] appropriate formats to communicate results” (Science, p. 20); Using a “variety of forms” to “communicate ideas, procedures, and results” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.11, A1.12. Communicating	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“Us[ing] numeric, symbolic, and graphic modes of representation” (Science, p. 20); “[U]sing appropriate linguistic, numeric, symbolic, and graphic modes of representation [. . .] to communicate ideas, procedures, and results” (Science, p. 19)	Science - Scientific Investigation Skills and Career Exploration: A1.12. Communicating	Not Represented
“Express[ing] results accurately and precisely” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.13. Communicating	∴
“Us[ing] correct terminology and appropriate units of measurement” (Science, p. 20)	Science - Scientific Investigation Skills and Career Exploration: A1.12. Communicating	∴
Environmental Literacy		
“[E]xamining critical inquiry questions related to [. . .] the impact of human activity on the environment” (Science, p. 36)	Science - Biology: Sustainable Ecosystems (Academic) / Biology: Sustainable Ecosystems and Human Activity (Applied): B2. Developing Skills of Investigation and Communication, B3. Understanding Basic Concepts	Not Represented
Technological Literacy		
Critically evaluating information presented (Science, p. 3)	Science - Earth and Space Science: The Study of the Universe (Academic) / Space Exploration (Applied): D1.1	Not Represented
Spatial Literacy		
Developing and using spatial skills (Geography, p. 28)	Geography - Geographic Inquiry and Skill Development: A2. Developing Transferable Skills	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
Using “map, globe, and graphing skills” (Geography, p. 28)	Geography - Geographic Inquiry and Skill Development: A2.1	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
Analyzing diverse graphic texts (History, p. 24)	History - Creating Canada, 1850-1890: A1.4	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
“[C]onstruct[ing]” diverse “graphic texts” (History, p. 24)	History - Creating Canada, 1850-1890: A1.7	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[M]ak[ing] meaning of maps and graphs” (History, p. 24)	History - Canada, 1890-1914: A Changing Society: B2.3	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
“[G]athering data or information” (History, p. 24) from digital and/or visual texts (e.g., “online atlases or interactive maps” (p. 24))	History - Creating Canada, 1850-1890: A2.2	Reading Skills – Engaging With Texts: Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3)
French or FSL Literacy		
“[D]eveloping strategies” (French as a Second Language, p. 48)	French as a Second Language - Reading: C1.4. Developing Vocabulary	Not Represented
“[U]nderstand[ing]” texts (French as a Second Language, p. 48)	French as a Second Language - Listening: A1.2. Demonstrating Understanding	Reading Skills – Understanding Texts: All skills listed
Talking about texts (French as a Second Language, p. 48)	French as a Second Language - Speaking: B1. Speaking to Communicate	Not Represented
Writing about texts (French as a Second Language, p. 48)	French as a Second Language - Writing: D1. Purpose, Audience, and Form	Writing Skills – All skills listed
Developing and using “oral communication skills” (French as a Second Language, p. 48)	French as a Second Language - Listening: A1. Listening to Understand, A2. Listening to Interact, A3. Intercultural Understanding / Speaking: B1. Speaking to Communicate, B2. Speaking to Interact, B3. Intercultural Understanding	Not Represented
“[P]resent[ing] [. . .] ideas” (French as a Second Language, p. 48)	French as a Second Language - Speaking: B1. Speaking to Communicate, Writing: D1.2. Writing in a Variety of Forms	Writing Skills – Presenting Ideas and Opinions: All skills listed
Physical Literacy		
Developing and using language skills (Health and Physical Education, p. 70)	Health and Physical Education - Healthy Living: C2.2. Personal Safety and Injury Prevention	Reading Skills: All skills listed; Writing Skills: All skills listed
Developing and using communication skills (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills	Writing Skills: All skills listed
Developing and using “thinking skills” (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
'Understanding the connections' between "active living, movement competence, healthy living, and living skills" (Health and Physical Education, p. 10)	Health and Physical Education - Living Skills: 1.	Not Represented
Developing and using "oral communication skills" (Health and Physical Education, p. 71)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills	Not Represented
"[E]xplor[ing]" and "understand[ing] ideas and concepts" (Health and Physical Education, p. 71)	Health and Physical Education - Active Living: A2. Physical Fitness	Reading Skills – Understanding Texts: All skills listed
"[I]dentify[ing] and solv[ing] problems" (Health and Physical Education, p. 71)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴
'Organizing personal experience and knowledge' (Health and Physical Education, p. 71)	Health and Physical Education - Living Skills: 1.2. Personal Skills	Reading Skills – Making Connections: All skills listed
Talking about "a range of topics in health and physical education" (Health and Physical Education, p. 71)	Health and Physical Education - Healthy Living: C2.3. Substance Use, Addictions, and Related Behaviours, C1.4. Human Development and Sexual Health	Not Represented
Communicating through "different forms of movement" (Physical and Health Education Canada, "What is Physical Literacy," as cited in Health and Physical Education, p. 7)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills	Not Represented
Analyzing (Physical and Health Education Canada, "What is Physical Literacy," as cited in Health and Physical Education, p. 7)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	Reading Skills – Making Connections: "[M]aking connections between information and ideas in a reading selection and personal knowledge and experience (interpreting reading selections by integrating information and ideas in a reading selection and personal knowledge and experience)" (EQAO, 2011f, p. 2); "[C]onnect[ing] ideas from a text to [one's] own ideas to interpret and make judgments about what the text is saying" (EQAO, 2015n)
Developing "movement skills" (Health and Physical Education, p. 27)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B1.4	Not Represented
Participating in "physical activities" (Health and Physical Education, p. 27)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B1. Movement Skills and Concepts	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
'Applying movement concepts, strategies, and principles' (Health and Physical Education, p. 27)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B1. Movement Skills and Concepts	Not Represented
Applying motor skills "in a wide variety of physical activities" (Health and Physical Education, p. 27)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B1. Movement Skills and Concepts	Not Represented
Developing "movement competence" (Health and Physical Education, p. 27)	Health and Physical Education - Living Skills: 1.4. Interpersonal Skills	Not Represented
Health Literacy		
Developing and using language skills (Health and Physical Education, p. 70)	Health and Physical Education - Healthy Living: C2.2. Personal Safety and Injury Prevention	Reading Skills: All skills listed; Writing Skills: All skills listed
Developing and using communication skills (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills	Writing Skills: All skills listed
Developing and using "thinking skills" (Health and Physical Education, p. 70)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴
'Understanding the connections' between "active living, movement competence, healthy living, and living skills" (Health and Physical Education, p. 10)	Health and Physical Education - Living Skills: 1.	Not Represented
"[U]nderstand[ing]" information (Irving Rootman and Deborah Gordon-El-Bihbety, <i>A Vision for a Health Literate Canada</i> , 2008, as cited in Health and Physical Education, p. 7)	Health and Physical Education - Healthy Living: C1.1. Healthy Eating, C2.4. Human Development and Sexual Health	Reading Skills – Understanding Texts: All skills listed
"[C]ommunicat[ing]" information (Irving Rootman and Deborah Gordon-El-Bihbety, <i>A Vision for a Health Literate Canada</i> , 2008, as cited in Health and Physical Education, p. 7)	Health and Physical Education - Living Skills: 1.3. Interpersonal Skills	Writing Skills: All skills listed
"[D]evelop[ing] [. . .] healthy living" (Health and Physical Education, p. 34)	Health and Physical Education - Healthy Living: C1. Understanding Health Concepts, C2. Making Healthy Choices, C3. Making Connections for Healthy Living	Not Represented
"[M]aintain[ing] [. . .] healthy living" (Health and Physical Education, p. 34)	Health and Physical Education - Healthy Living: C2.3	Not Represented
"[E]njoy[ing] healthy living" (Health and Physical Education, p. 34)	Health and Physical Education - Active Living: A1.2	Not Represented
"[S]olv[ing] problems" (Health and Physical Education, p. 34)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[M]ak[ing] decisions” (Health and Physical Education, p. 34)	Health and Physical Education - Healthy Living: C2. Making Healthy Choices	Not Represented
“[S]et[ting] goals that are directly related to [one’s] personal health and well-being” (Health and Physical Education, p. 34)	Health and Physical Education - Active Living: A2.4	Not Represented
Food Literacy		
<i>Not Represented</i>	<i>Not Represented</i>	N/A
Game Literacy		
“[D]evis[ing] and apply[ing] strategies and tactics” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2. Movement Strategies, B2.3	Not Represented
“[U]nderstanding [. . .] how games and activities are structured and how they work” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.1	Not Represented
“[U]nderstanding [. . .] the components and other features that characterize individual games and activities” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.1	Not Represented
“[T]ransfer[ring] strategies, tactics, and skills from one game or activity to another in the same category” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.2	∴
Understanding how “games can be grouped into broad categories on the basis of common features and similarities” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.2	Not Represented
“[T]hink[ing] strategically” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.3	∴
“[M]ak[ing] connections between different games and game components” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.1	Not Represented
Developing and using “movement strategies” (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2. Movement Strategies	Not Represented
Using critical thinking skills (Health and Physical Education, p. 32)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	Not Represented
Using creative thinking skills (Health and Physical Education, p. 32)	Health and Physical Education - Living Skills: 1.5. Critical and Creative Thinking	∴

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Increasing one's "ability to participate successfully in a wide range of games and other activities" (Health and Physical Education, p. 32)	Health and Physical Education - Movement Competence: Skills, Concepts, and Strategies: B2.3	Not Represented
Historical Literacy		
"[A]naly[z]ing [. . .] evidence from primary and secondary sources" (History, p. 7)	History - Creating Canada, 1850-1890: A2.2 <i>* Refers to investigating multiple perspectives using sources, not analyzing explicitly as the focus</i>	Not Represented
Musical Literacy		
"[U]nderstand[ing] and us[ing] the variety of ways in which meaning is communicated through music" (Arts, p. 179)	Arts - Music: C1.4	Not Represented
Using "the elements" (Arts, p. 179)	Arts - Music: C1. Creating and Performing, C2. Reflecting, Responding, and Analy[z]ing, C3. Exploring Forms and Cultural Contexts	Not Represented
Using "aural skills" (Arts, p. 179)	Arts - Music: C2.2 <i>* Listening</i>	Not Represented
Using "reading skills" (Arts, p. 179)	Arts - Music: C1.5 <i>* Term 'reading' is not used explicitly – understanding notation instead</i>	Not Represented
Using "writing skills" (Arts, p. 179)	Arts - Music: C1.3, C1.5 <i>* Term 'writing' is not used explicitly – 'composition' instead</i>	Not Represented
Using "notation, symbols, terminology" (Arts, p. 179)	Arts - Music: C1.5	Not Represented
"Singing" (Arts, p. 16)	Arts - Music: C1.1	Not Represented
"Playing" (Arts, p. 16)	Arts - Music: C1.1	Not Represented
"Moving" (Arts, p. 16)	Arts - Music: Fundamental Concepts	Not Represented
"Performing" (Arts, p. 16, 179)	Arts - Music: C1. Creating and Performing	Not Represented
"Creating" (Arts, p. 16)	Arts - Music: C1. Creating and Performing	Not Represented
"Listening" (Arts, p. 16, 179)	Arts - Music: C2.3, C2.2	Not Represented
"Responding" to music and musical experiences (Arts, p. 16)	Arts - Music: C2. Reflecting, Responding, and Analy[z]ing	Not Represented
Visual Literacy		
"[I]nvestigat[ing] and understand[ing] [. . .] media" (Arts, p. 17)	Arts - Visual Arts: D3.2	Not Represented
"[I]nvestigat[ing] and understand[ing] [. . .] art works" (Arts, p. 17)	Arts - Visual Arts: D2. Reflecting, Responding, and Analy[z]ing	Not Represented
Engaging with "a broad range of forms, genres, and styles" (Arts, p. 17)	Arts - Visual Arts: D1.1, Dance: A3.1	Reading Skills – Engaging With Texts: All skills listed; Writing Skills – Writing Different Types of Texts: All skills listed

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
Engaging with “the traditional arts of drawing, painting, sculpting, printmaking, architecture, and photography, as well as commercial art, traditional and fine crafts, industrial design, performance art, and electronic and media arts” (Arts, p. 17)	Arts - Visual Arts: D1.4	Not Represented
Expressing oneself “in visual ways” (Arts, p. 17)	Arts - Visual Arts: D1. Creating and Presenting, D2. Reflecting, Responding, and Analy[z]ing	Not Represented
“[D]eveloping the ability to respond to [. . .] works of art” (Arts, p. 17)	Arts - Dance: A2. Reflecting, Responding, and Analy[z]ing	Not Represented
“[D]eveloping the ability to [. . .] analy[z]e [. . .] works of art” (Arts, p. 17)	Arts - Dance: A2. Reflecting, Responding, and Analy[z]ing	Not Represented
“[L]earn[ing] [. . .] to communicate [one’s] understandings of the meaning and intentions [one] sees in the works” (Arts, p. 17)	Arts - Dance: A2.1	Not Represented
Arts/Artistic Literacy		
“[P]erceiving [. . .] various aspects of our world through exploration and experimentation” (Arts, p. 4)	Arts - Visual Arts: D3.1	Not Represented
“[I]nterpreting [. . .] various aspects of our world through exploration and experimentation” (Arts, p. 4)	Arts - Dance: A2.1 <i>* Terms ‘exploration’ and ‘experimentation’ not used though; alternative expression</i>	Not Represented
Expressing oneself artistically (Arts, p. 4)	Arts - Dance: A1. Creating and Presenting, Drama: A1. Creating and Presenting, Music: A1. Creating and Performing, Visual Arts: A1. Creating and Presenting	Not Represented
“[R]estructuring personal ideas and experiences” (Arts, p. 4)	Arts - Dance: A2.1, Music: C2.1 <i>* ‘Restructuring’ is not the term used; alternative expression</i>	Not Represented
“[U]nderstanding” what “artists [. . .] do as individuals and as a community” (Arts, p. 4)	Arts - Visual Arts: D2.4, D3.2	Not Represented
“[U]nderstanding” what “musicians [. . .] do as individuals and as a community” (Arts, p. 4)	Arts - Music: C2.3, C3.1	Not Represented
“[U]nderstanding” what “actors [. . .] do as individuals and as a community” (Arts, p. 4)	Arts - Drama: B2.3, B3.2	Not Represented
“[U]nderstanding” what “dancers do as individuals and as a community” (Arts, p. 4)	Arts - Dance: A2.3, A3.2	Not Represented
“[U]nderstanding [. . .] how ideas are generated in the various arts” (Arts, p. 4)	Arts - Dance: A2.2, Drama: B2.2, Music: C2.2, Visual Arts: D2.2	Not Represented

Literacy Construct	Expectation (Curriculum)	Test Construct: Category and Skill
“[U]nderstanding [. . .] what benefits are associated with art activities” (Arts, p. 4)	Arts - Drama: B3.2 <i>* Term used is ‘contributions’ rather than ‘benefits’ or ‘gains’</i>	Not Represented
Multiple Literacies		
Learning “about different art forms within the arts disciplines” (Arts, p. 54)	Arts - Dance: Fundamental Concepts, Drama: Fundamental Concepts, Music: Fundamental Concepts, Visual Arts: Fundamental Concepts	Not Represented
Communicating meaning (Arts, p. 54)	Arts - Dance: A1. Creating and Presenting <i>* If ‘meaning’ can also be substituted with ‘feelings’ or ‘ideas’ in this case</i>	Writing Skills – Developing and Supporting a Main Idea: All skills listed
“[I]nterpret[ing] meaning” (Arts, p. 54)	Arts - Dance: A2.1	Writing Skills – Constructing Meaning: All skills listed
Using “the multiple avenues for expression” made available through the arts (Arts, p. 54)	Arts - Dance: A2.1	Not Represented
Using “visual” modes of expression (Arts, p. 54)	Arts - Visual Arts: D1. Creating and Presenting	Not Represented
Using “oral” modes of expression (Arts, p. 54)	Arts - Drama: B1. Creating and Presenting	Not Represented
Using “gestural” modes of expression (Arts, p. 54)	Arts - Dance: A1.1	Not Represented
“[D]eveloping and representing [one’s] understanding” through “different forms of communication” offered through the arts (Arts, p. 55)	Arts - Dance: A2, Drama: B2, Music: C2, Visual Arts: D2. Reflecting, Responding, and Analy[z]ing	Not Represented
Preparing “to adapt to change” (Arts, p. 55)	Arts - Visual Arts: D3.1	Not Represented
Linguistic Literacy		
Using “different means of expression” (Arts, p. 55)	Arts - Dance: A1. Creating and Presenting, A2.1	Not Represented
Developing an understanding of the meaning of the artistic languages used in art forms from various cultures (Arts, p. 55)	Arts - Dance: A3. Exploring Forms and Cultural Contexts	Not Represented

Note. Sources for the curriculum documents: Arts (OMOE, 2009); English (OMOE, 2007); French as a Second Language (OMOE, 2014b); Geography (OMOE, 2013b); Health and Physical Education (OMOE, 2015b); History (OMOE, 2013a); Mathematics (OMOE, 2005); Science (OMOE, 2008).

APPENDIX D: Additional Resources for the Expanded Mapping – Part Two

Table D1 presents the literacy construct I have designed for the literacy test. This construct is intended to be a reflection of what EQAO claims to measure and report on. This phase of the construct analysis involved reconciling and synthesizing EQAO's different iterations of what is being evaluated and reported on. The mapping draws on EQAO's (a) descriptions of the testing practice (e.g., curriculum connections, planning and preparation guides); (b) scoring guides; (c) technical reports; and (d) reporting documents (e.g., the Individual Student Reports).

In the left-most column of the mapping, I present the categories of the construct. This is how I have come to understand and organize the different skills that EQAO claims to measure and report on. The language used to develop these categories is based on, and is reflective of, EQAO's articulations of what the test measures. The middle column of the table presents the skills that are identified throughout EQAO's documentation about the OSSLT. The right-most column identifies the type of source from which this information has been gathered.

Table D1. *Literacy Construct for the OSSLT*

Category	Skills	Source
	Reading	
Engaging With Texts	• “[U]s[ing] reading strategies” (EQAO, 2011f, p. 1) • “[I]nteract[ing] with” texts (EQAO, 2011f, p. 1) • Engaging with “a variety of narrative, informational and graphic selections” (EQAO, 2011f, p. 1) • Reading an information paragraph that “presents ideas and information on a topic” (EQAO, 2016e, p. 3) • Reading a news report that “presents information in the form of a news story” (EQAO, 2016e, p. 3) • Reading a dialogue that “presents a conversation between two or more people” (EQAO, 2016e, p. 3) • Reading a real-life narrative that “presents an account of a significant time in an individual’s life” (EQAO, 2016e, p. 3) • Reading a graphic text that “presents ideas and information with the help of graphic features, such as diagrams, photographs, drawings, sketches, patterns, timetables, maps, charts or tables” (EQAO, 2016e, p. 3) • “[P]rovid[ing] [. . .] ideas and information from the reading selection” (EQAO, 2015i, Reading Open Response: Section I and V; see also EQAO, 2014f, Reading Open Response: Section IV, Q6 and 7) • “[P]rovid[ing] [. . .] ideas and information from the reading selection” (EQAO, 2015i, Reading Open Response: Section I and V; see also EQAO, 2014f, Reading Open Response: Section IV, Q6 and 7)	Description Description Description Description Description Description Description Description Scoring Guides [R2, R3]

Category	Skills	Source
Understanding Texts	• “[U]nderstand[ing]” a variety of written texts” (EQAO, 2011f, p. 2) • “[I]ndicat[ing] [. . .] reading comprehension” (EQAO, 2015i, Reading Open Response: Section I and V; see also EQAO, 2014f, Reading Open Response: Section IV, Q6 and 7)	Description Scoring Guides [R2, R3]
• Understanding Explicitly Stated Information and Ideas	• “[U]nderstanding explicitly stated information and ideas” (EQAO, 2011f, p. 2) • “[D]emonstrat[ing] [an] understanding of explicit (directly stated) [. . .] meanings” (EQAO, 2011f, p. 1) • “[D]etect[ing] and understand[ing] information and ideas stated explicitly in reading selections that represent a variety of text types” (W. T. Rogers, 2013, p. 10) • “[U]nderstanding explicitly (directly) stated ideas and information” (EQAO, 2016e, p. 3) • “[U]nderstanding explicitly” (EQAO, 2015f, p. 174) • “[U]nderstand[ing] information that is clearly stated” (EQAO, 2015n)	Description [R1] Description Description Description Technical Report [R1] Reporting
• Understanding Implicitly Stated Information and Ideas	• “[U]nderstanding implicitly stated information and ideas (making inferences)” (EQAO, 2011f, p. 2) • “[D]emonstrat[ing] [an] understanding of [. . .] implicit (indirectly stated) meanings” (EQAO, 2011f, p. 1) • Understanding [. . .] implicitly stated information and ideas in reading selections that represent a variety of text types” (W. T. Rogers, 2013, p. 10) • “[U]nderstanding implicitly (indirectly) stated ideas and information” (EQAO, 2016e, p. 3) • “[U]nderstanding implicitly” (EQAO, 2015f, p. 174) • “[C]onnect[ing] ideas from different parts of a text and mak[ing] conclusions” (EQAO, 2015n)	Description [R2] Description Description Description Technical Report [R2] Reporting
Making Connections	• “[M]aking connections between information and ideas in a reading selection and personal knowledge and experience (interpreting reading selections by integrating information and ideas in a reading selection and personal knowledge and experience)” (EQAO, 2011f, p. 2) • “[C]onnect[ing] [one’s] understanding of the text to [one’s] personal experience and knowledge” (EQAO, 2011f, p. 1) • “[C]omparing and contrasting the ideas presented in texts and drawing upon [one’s] own knowledge and experience gained from other texts [one has] read and the world around them” (W. T. Rogers, 2013, p. 10) • “[M]aking connections between information and ideas in a reading selection and personal knowledge and experience” (EQAO, 2016e, p. 3) • “[M]aking connections” (EQAO, 2015f, p. 174) • “[C]onnect[ing] ideas from a text to [one’s] own ideas to interpret and make judgments about what the text is saying” (EQAO, 2015n)	Description [R3] Description Description Description Technical Report [R3] Reporting
Constructing Meaning	• “[C]onstruct[ing] meaning from” texts (EQAO, 2011f, p. 1) • “[C]onstruct[ing] an understanding of the meaning of the texts” (EQAO, 2011f, p. 1) • “[M]ak[ing] meaning for a variety of written texts” (EQAO, 2011f, p. 2)	Description Description Description

Category	Skills	Source
Writing		
Communicating	• “[C]ommunicating in a variety of forms, and for a range of purposes and audiences” (EQAO, 2011f, p. 2) • “[C]ommunicat[ing] ideas and information clearly and coherently” (EQAO, 2011f, p. 1)	Description Description
Responding	• Writing a short response to a prompt (EQAO, 2011f, p. 1) • Writing a short response “in complete sentences” and in the space provided (EQAO, 2016e, p. 18) • Responding in relation to a provided text (EQAO, 2014f, 2015i)	Description Description Scoring Guides [W4]
Using Personal Knowledge and Skills	• “[D]emonstrat[ing] [one’s] writing skills using [one’s] knowledge and personal experience” (EQAO, 2016e, p. 18)	Description
Writing Different Types of Texts	• “[W]rit[ing]” different types of texts, such as “short responses, a series of paragraphs expressing an opinion and a news report” (EQAO, 2011f, p. 1) • Writing “a news report based on [or ‘related to’] the picture and headline provided” (EQAO, 2016e, p. 15) • “[F]ind[ing] a link between the headline and the photograph that could be used as an event for a report that would appear in a newspaper” (EQAO, 2016e, p. 15) • Writing a news report that “is written in the third person with a reportorial tone” (EQAO, 2016e, p. 15)	Description Description Description Description
Presenting Ideas and Opinions	• Writing a news report that “contains sufficient and specific information and facts related to the event” (EQAO, 2016e, p. 15) • “[E]xpressing an opinion” through a “series of paragraphs” (EQAO, 2011f, p. 1); Writing a series of paragraphs expressing an opinion on a topic that is “current and familiar to teenagers” (EQAO, 2016e, p. 17) • Writing a series of paragraphs where one’s opinion “must be stated clearly at the beginning or end of the response” (EQAO, 2016e, p. 17) • Presenting an opinion (EQAO, 2014f) • “[D]evelop[ing]” a response with “ideas and information” (EQAO, 2015i, Short Writing Topic Development: Section III; see also EQAO 2014f, Short Writing Topic Development: Section V) • Demonstrating “topic development” (EQAO, 2015f, p. 174)	Description Description Description Scoring Guides [W4] Scoring Guides [W4] Technical Report [W4]
• Developing and Supporting a Main Idea	• “[D]eveloping a main idea with sufficient supporting details” (EQAO, 2011f, p. 2, 2016e, p. 15) • “[P]rovid[ing] supporting detail and evidence” (W. T. Rogers, 2013, p. 10) • “[E]xpress[ing] an opinion and support[ing] it with details” (EQAO, 2016e, p. 17) • Writing a series of paragraphs expressing an opinion and “adequately support the opinion with reasons, examples, or facts” (EQAO, 2016e, p. 17) • Including “supporting details” in written work (EQAO, 2014f, 2015i) • “[D]eveloping main idea” (EQAO, 2015f, p. 174) • “[D]evelop[ing] a main idea with enough supporting details to be easily understood by the reader” (EQAO, 2015n)	Description [W1] Description Description Description Scoring Guides [W4] Technical Report [W1] Reporting

Category	Skills	Source
• Organizing Information and Ideas	• “[O]rganizing information and ideas in a coherent manner” (EQAO, 2011f, p. 2, 2016e, p. 15);	Description [W2]
	• “[O]rganiz[ing] ideas” (W. T. Rogers, 2013, p. 10)	Description
	• Writing a news report that is “coherent and organized” (EQAO, 2016e, p. 15)	Description
	• Writing a series of paragraphs that is “coherent and organized” (EQAO, 2016e, p. 17)	Description
	• Writing a series of paragraphs that includes “an introduction, development [. . .] and a conclusion” (EQAO, 2016e, p. 17)	Description
	• Demonstrating “organization” (EQAO, 2014f, Long Writing: Section I; see also EQAO, 2015i, Long Writing: Section IV)	Scoring Guides [W4]
	• “[O]rganizing information” (EQAO, 2015f, p. 174)	Technical Report [W2]
	• “[O]rganiz[ing] and order[ing] ideas in a clear, understandable way” (EQAO, 2015n)	Reporting
• Attending to Conventions	• Preparing “first draft (i.e., unpolished) writing” (EQAO, 2011f, p. 1)	Description
	• “[U]sing conventions (spelling, grammar, punctuation) in a manner that does not distract from clear communication” (EQAO, 2011f, p. 2)	Description [W3]
	• “[R]ecogniz[ing] and us[ing] correct spelling, subject-verb agreement, capitalization, and punctuation” (W. T. Rogers, 2013, p. 10)	Description
	• “[U]sing conventions (syntax, spelling, grammar, punctuation) in a manner that does not distract from clear communication” (EQAO, 2016e, p. 15)	Description
	• Writing a news report with correct “grammar, spelling, punctuation[,] and sentence structure” (EQAO, 2016e, p. 15)	Description
	• Writing a series of paragraphs with correct “grammar, spelling, punctuation[,] and sentence structure” (EQAO, 2016e, p. 17)	Description
	• Demonstrating “control of conventions” where conventions refer to the use of “syntax, grammar, usage, spelling and punctuation” (EQAO, 2015i, Short Writing Conventions: Section III; see also EQAO 2014f, Short Writing Conventions: Section V)	Scoring Guides [W3]
	• Demonstrating correct “use” or “control of conventions” (EQAO, 2015i, Long Writing Conventions: Section IV; see also EQAO, 2014f, Long Writing Conventions: Section I)	Scoring Guides [W3]
	• “[U]sing conventions” (EQAO, 2015f, p. 174)	Technical Report [W3]
	• “[U]s[ing] correct syntax, spelling, grammar and punctuation to make [one’s] writing clear” (EQAO, 2015n)	Reporting

Note. When a skill (e.g., R1 or W4) is listed following the source type (e.g., description, scoring guide, technical report, or reporting resources), the source listed the definition or description being identified with reference to one of the specific skills that EQAO claims to measure. The reading skills being evaluated are identified by EQAO as follows: “R1 = understanding explicitly; R2 = understanding implicitly; R3 = making connections” (EQAO, 2011d, pp. 167-168). The writing skills being evaluated are identified by EQAO as follows: “W1 = developing main idea; W2 = organizing information; W3 = using conventions; W4 = topic development” (EQAO, 2011d, pp. 167-168). ‘W4’ appears to be a combination of evaluating W1 and W2 through a single rubric.

As noted in Chapter 4, the test’s construct sample has been organized into two sections: Reading and Writing. This division of the construct appropriately reflects the stated focus of the testing practice, which is to measure students’ literacy proficiency based on their reading and writing skills. The OSSLT is one of the tools being used to determine whether or not students are

able to meet the literacy graduation requirement, and the OMOE has described this requirement as being based on reading and writing skills. The sections of the literacy test are also uniquely identified as either being used to evaluate reading or writing skills. Understanding what the binary of reading and writing entails for EQAO is what is of particular interest for this analysis of the test's construct sample. How EQAO is defining reading and writing, and which aspects of the Ontario curriculum they are working with to develop a construct for the test is the focus of this analysis. Since it is possible for reading and writing to be complexly presented, this analysis sought to map all that EQAO claims to measures in relation to these two concepts. What is mapped in the construct should correspond with, and sufficiently sample, the curriculum, and what is expected of Ontario students with respect to literacy development and achievement up until the end of Grade 9.

Throughout this mapping, I have identified the sources of information for each of the items that are included in this construct mapping. Noting the sources of the information gathered is significant for understanding whether something is claimed or demonstrated in practice. Considering descriptions of what is evaluated is similar to working with the peripheral matter of the curriculum. When analyzing the Ontario curriculum, I sought to find evidence of what is valued in each program as part of students' literacy education within the explicit course expectations. When analyzing the test documents I similarly took into consideration the many different ways in which what is being valued in the testing context is described, but I also sought to make a distinction between what is claimed and what is evidenced in the scoring guides. EQAO's scoring guides are the most explicit presentation of what is evaluated through the test. The scoring guides include a selection of the rubrics and the annotated anchor responses that are released. These resources list the correct answers for the multiple choice questions, and they illustrate how the open-response items are scored.

I have also noted how each test item is mapped in relation to the six identified literacy skills that EQAO claims to assess and report on. When describing and reporting results for the OSSLT, EQAO usually refers to three reading skills and three writing skills (see EQAO, 2011f, pp. 1-2, 2016a, pp. 405, 2015n, 2016e, p. 3). In the technical reports, 'Writing Skill 4' or 'W4' is introduced, which is defined as "topic development." W4 seems to represent the combination of W1 and W2, which are "developing main idea" and "organizing information" (EQAO, 2015f, p. 174). In the technical reports, EQAO identifies which of these six skills are being evaluated

through each test item. Thus, even though it is not clear what specific demonstrations of these skills are expected to entail, as outlined in the scoring guides for the open-response items, it is still possible to identify which skills EQAO explicitly claims to be measuring for each test item. The Individual Student Reports indicate how students performed. These reports include a numerical test score, a test result of successful or unsuccessful, and also a brief narrative that reports a student's achievement in terms of each of the six skills being evaluated through the OSSLT. These reports are also intended to explain to test takers how their test results are intended to be interpreted and how their test scores and test results can be used.

APPENDIX E: Additional Resources for the Expanded Mapping – Part Three

Since the full expected literacy construct designed for this study is so detailed, the comparative mapping of the curriculum and the test is presented in an appendix (see Appendix C). In Chapter 4, an overview of the results of the comparative mapping is presented based on an overview of the expected literacy construct. Some facets of the curriculum's expected literacy construct are grouped together in the overview, which can lead to different overall impressions of construct representation when reading the overview of the results of the comparative mapping. Thus, in this appendix, I present a detailed discussion of proportional representation to identify the representational differences between the full mapping and the overview of the results.

Reading across the overview of the results (see Table 8 presented in Chapter 4), there is anywhere from 0% to 80% construct representation. Reading across the full comparative mapping (see Table C1 presented in Appendix C), there is anywhere from 0% to 83% construct representation. Table E1 summarizes the coding results. This presentation of the results is organized based on the organization of the expected literacy construct, which focuses on the different types of literacy introduced throughout the curriculum. Since this organization principle seems to best reflect the ways in which literacies are introduced throughout the curriculum, this organization of the results of the comparative mapping is particularly useful in providing a commentary on how well critical literacy in particular, as one of many types of literacy in the curriculum context, is represented in the test construct.

Health literacy and spatial literacy are the two examples where the overview might give the impression that there is less construct representation than the mapping suggests. There is 2-5% greater construct representation in the overview than there is in the full mapping for six of the twenty-one types of literacy (see Literacy (General), Scientific, Critical, Physical, Visual, and Multiple Literacies). Mathematics literacy is the exception with a 10% difference, but the number of items being mapped makes this discrepancy no more significant than the others. There is no difference for twelve of the twenty-one types of literacy. Seven of the types of literacy are represented by the same number of items in both iterations meaning the coding is the same in both the overview and the full mapping. In both representations, nine types of literacy suggest 0% construct representation (see Game, Arts, Music, Media, Financial, Linguistic, Historical, Environmental, and Technological Literacy).

Table E1. *Instances of Representation Reflected in the Overview and in the Full Mapping*

	Literacy (General)		Scientific Literacy		Critical Literacy	
	Overview	Full	Overview	Full	Overview	Full
Total Items	41	59	23	35	16	24
Represented (▲)	15 (37%)	19 (32%)	4 (17%)	5 (14%)	2 (13%)	2 (8%)
Not Represented (→)	21	31	17	28	11	16
Potential Relationships (∴)	5	9	2	2	3	6
	Physical Literacy		Health Literacy		Game Literacy	
	Overview	Full	Overview	Full	Overview	Full
Total Items	12	16	8	12	8	11
Represented (▲)	4 (33%)	5 (31%)	2 (25%)	4 (33%)	0 (0%)	0 (0%)
Not Represented (→)	6	9	4	6	5	8
Potential Relationships (∴)	2	2	2	2	3	3
	Visual Literacy		Spatial Literacy		Arts Literacy	
	Overview	Full	Overview	Full	Overview	Full
Total Items	6	8	5	6	5	10
Represented (▲)	1 (17%)	1 (13%)	4 (80%)	5 (83%)	0 (0%)	0 (0%)
Not Represented (→)	5	7	1	1	5	10
Potential Relationships (∴)	0	0	0	0	0	0
	Music Literacy		Mathematical Literacy		Multiple Literacies	
	Overview	Full	Overview	Full	Overview	Full
Total Items	5	13	4	5	4	9
Represented (▲)	0 (0%)	0 (0%)	2 (50%)	2 (40%)	1 (35%)	2 (22%)
Not Represented (→)	5	13	2	3	3	7
Potential Relationships (∴)	0	0	0	0	0	0
	Media Literacy		Financial Literacy		Info.	French
	Overview	Full	Overview	Full	Both	Both
Total Items	4	5	3	4	13	6
Represented (▲)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (23%)	3 (50%)
Not Represented (→)	4	5	3	4	9	3
Potential Relationships (∴)	0	0	0	0	1	0
	Linguistic	Historical	Enviro.	Techno.	Food	
	Both	Both	Both	Both	Both	
Total Items	2	1	1	1	X	
Represented (▲)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	X	
Not Represented (→)	2	1	1	1	X	
Potential Relationships (∴)	0	0	0	0	X	

Focusing on the full mapping, spatial literacy has the highest construct coverage (83%) with the majority of listed items resonating with the testing practice. Note though that there are only six items, while other categories within the construct have more items, including critical literacy with twenty-four items (and 8% representation), scientific literacy with thirty-five items (and 14% representation), and the general concept of literacy with fifty-nine items (and 32% representation). There are a few other categories that give the impression of higher construct representation that, like spatial literacy, also do not include many items. Multiple literacies has nine items (and 22% representation), health literacy has twelve items (and 33% representation), physical literacy has sixteen items (and 31% representation), and mathematics literacy has only five items (but 40% representation). While most of the categories in the construct that do not align with the testing practices (indicated as 0% construct representation) include five or fewer

items, arts/artistic literacy includes ten items, game literacy includes eleven items, and music literacy includes thirteen items. None of these items are explicitly reflected in the test.

The purpose of quantifying the coding results is to compare and to comment on the proportionality of how representation might be reflected differently through alternative representations of a mapping, as is the case when comparing the full mapping and the overview of the mapping. Quantifying the extent of the construct representation and/or underrepresentation is not the focus of this inquiry though. As noted in Chapter 4, the mappings being used were not constructed with the intention of being indicative of quantities of expectations or quantities of literacy skills. There are instances of repetition within the expected literacy construct in particular that would need to be addressed should any impression of quantities be considered. For instance, the literacy-associated action ‘analyzing’ appears under the general concept of literacy, and it also appears under the headings for many different types of literacy sometimes positioned slightly differently. Rather than consolidating these potential repetitions in the curriculum construct, I have presented a construct that highlights the unique affordances of narrative mapping. The mappings constructed through this inquiry work with, and strive to maintain, the nuances of language that would likely be eliminated through a consolidation of the construct. There is also no indication of the significance of any particular expectation over any others, and having a large number of actions does not necessarily outweigh the affordances of one particular literacy action. For example, there are many literacy actions listed under the category for game literacy, none of which are reflected in the testing practice. Game literacy is only introduced in the Health and Physical Education curriculum (OMOE, 2015b); however, through this program, students are expected to be able to demonstrate that they are able to understand the structure and mechanics of games, how to group and categorize games, how to “make connections between different games and game components” (p. 32), and how to “transfer strategies, tactics, and skills from one game or activity to another in the same category” (p. 32). This reference to transferring is the only action listed in the expected literacy construct that addresses skill transfer explicitly. A few other categories highlight making connections with one’s knowledge and experiences, but there is no explicit acknowledgement of learning and transferring skills across similar contexts. Even though this expectation only appears in one curricular context, this does not make the expectation any less valuable or any less significant than the other skills that might be expected in multiple contexts.

APPENDIX F: Literacies Graphic Organizer

Name: _____

Literacies Graphic Organizer

Literacy skills you have:	Literacy skills you struggle with or find more challenging:	Literacy skills you want to improve:

Your current literacy goals:

What do you predict your future literacy interests, needs, and goals will be?

Next year	In 5 years	In 10 years



Where do you see yourself? What will you be doing?	Where do you see yourself? What will you be doing?	Where do you see yourself? What will you be doing?

APPENDIX G: Self-Portrait / Mapping**Self-Portrait / Mapping**

My Interests/ Hobbies	I Read ... Watch... Listen to...Play...	My Influences / Role Models
Successes & Challenges at School	Name / Portrait Possible pseudonym: _____	My Family
My Community / School Involvement	My Plans after High School	My Goals

APPENDIX H: Graffiti Walls Handout**GRAFFITI WALLS**

Name: _____

LITERACIES

- a) How do you explain, define, or conceptualize literacies? What are they?
Who has literacy skills, who doesn't, and why?
- b) Where/How do you learn about literacies?
- c) What do you believe is the purpose of developing literacy skills? How important are these skills to you?
- d) When/How do you use literacies in a variety of contexts? List specific examples. What do literacies look like?

OSSLT

- a) How do students navigate the OSSLT?
- b) What literacies do you think the OSSLT is assessing? In which classes are you currently, or have you previously learned/developed these skills? List specific examples of courses and tasks.
- c) Can you explain the OSSLT's criteria of evaluation? What are your thoughts on the anchor responses provided?
- d) What do you value about the OSSLT? Is the test itself important? Which parts or aspects of the test are important? Why?
- e) What would you change about the OSSLT? How would you redesign this test? Why?
- f) Is this test an accurate representation of the literacy skills you think you need this year, and/or once you graduate? Why and/ or why not?

APPENDIX I: Interview Guide

Literacy Practices

- 1) What do you read, write, view, etc., and for what purposes?
- 2) Do you value the development of your literacy skills? Why? What do you do to improve your skills? Why are literacy skills important, and for whom are they important?
- 3) Have you participated in any school activities that promote literacy? Please explain.
 - a) Can you tell me about a literacy activity or assignment you have been working on in class recently? What did you have to do?
 - b) Did you like the task? Why or why not?
 - c) Is it a helpful assignment for you? Why or why not?
 - d) What did you learn?
 - e) How would you change the assignment?
 - f) Were you assessed? How? What feedback did you receive? Did it help you? How?
 - g) How does this task compare with what you usually do in this class? In your other classes?
- 4) If I wanted to test your literacy skills, what should I ask you? Why? What would I learn about your skills?

The OSSLT

- 1) Can you tell me what you know about the OSSLT? Why do you write the OSSLT? What is the purpose of the test?
- 2) How much do you value the literacy test? What are your thoughts on the OSSLT's format, the questions, the way the test is evaluated, and the results students receive the test-taking procedures?
- 3)
 - a) Can you tell me about your experience with the OSSLT?
 - b) Did you prepare for the test? How? When? Where? With who?
 - c) When did you receive your results?
 - d) Do you remember your reaction?
 - e) What results did you expect to receive? Do you think your results on the test are an accurate representation of your literacy skills? Why or why not? If not, how else can you demonstrate your skills, if not on the test? How else could we learn about your skills?
 - f) How have your results impacted you? Have they influenced any of your decisions? (e.g., which courses to take, whether you need to rewrite the test or take the OSSLC, plans for after high school, involvement in other school activities).
 - g) Who did you share your results with? Who did you talk to about your results? What did they say and do?
 - h) Do you recall how you responded to the questionnaire on the OSSLT?
- 4) Do any of your teachers talk about the OSSLT? In which classes? When (during the year)? What impact do you think the Literacy Test has on your classes? Please explain.
- 5) How has the OSSLT impacted your experiences with (critical) literacies? Please explain your understanding of critical literacies.

Questions About the Journaling [Similar questions used for the photography activity]

- a) Did you like this activity? Why or why not?
- b) Can you tell me about how you approached the activity? What did you do?
- c) Can you pick three or four pages and explain what you've done, and how you've responded to the prompts?
- d) Which page is your favourite? Why?
- e) Which pages confused you or were most challenging to engage with? Why do you think that is?
- f) Is there anything that you would like to add that you may not have been able to include in the journal? Are there any pages that you would like to elaborate on further?
- g) Do you feel as though you were able to communicate effectively through the journal? Why or why not? Do you feel as though it conveys your thoughts clearly enough? If not, what might have worked better?
- h) If you could have added your own prompts to the journal, what would they have been? What responses do you think you might have received?

Debriefing

- 1) Is there anything that I haven't asked you about that you would like to contribute to this project?
- 2) Do you have any questions about the study?
- 3) Do you think it is important to be talking to students about the test and to be asking what you think about your education, your learning experiences? Why?
- 4) Do you think it is important to highlight your story and your thoughts and experiences with this test and with literacies generally?

APPENDIX J: Sample Portrait Pages (Literacies and OSSLT)





Cadi Chandler

I write it because we're
forced to, and I want to
graduate high school. I think
the purpose of it is just to

make sure that students have
the required literacy before

leaving high school, which is a
good idea. Ya.

I figured a lot of people are probably going to be
really negative about the test, so I figured I'd
probably be a little different because I wasn't
that negative, I had no problems with it, I actually
like English so. I figured you could probably need
some people that are not, 'It's so horrible and
everything,' so, that'd be. I figured it would be
nice to have some contradicting views on it, so.

I am a good English student so I was not
worried about failing the test however, I write
a lot and I was worried about the time limit.
As it turns out I had to really rush the
last 2 questions and wished I had an extra
10 minutes. Therefore the only problem I had
with the literacy test was the time limit other
than that I like showing how well I can write.
I don't mind English tests at all but I hate
math tests.

There should be a way to determine if
a person is literate B4 they pass
highschool but the OSSET may not be the
best way.