

THE IMPACT OF THE ONTARIO SECONDARY SCHOOL LITERACY TEST ON L2
STUDENTS

By:

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ABSTRACT

The purpose of this thesis was to provide an exploratory study of the impact of the Ontario Secondary School Literacy Test (OSSLT) on L2 students. In order to do this, the thesis conducted a content analysis of two released versions of the OSSLT, as well as interviewed four Ontario secondary school teachers. For the content analysis, Coh-Metrix and VocabProfile tools were used to measure the readability of the 2008 and 2009 versions of the OSSLT, where it was found that reading passages on the OSSLT are fairly consistent in terms of their difficulty level for L2 students, whereas multiple choice and short answer questions sometimes use words that could potentially confuse L2 students and hinder their success on the OSSLT. Open coding was used to uncover four themes from the interview data, including the idea that deferrals from the test have a minimal impact on L2 students, the fact that European L2 students excel on the OSSLT whereas Asian L2 students struggle, the importance of a connection with Western culture for test success, and the belief that the OSSLC is a less rigorous alternative to the OSSLT.

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RESEARCH QUESTION

The Ontario Secondary School Literacy Test (OSSLT) is a mandatory test that all students in Ontario must write in the 10th grade in order to receive their Ontario Secondary School Diploma (OSSD). Over the last seven years, success rates on the OSSLT for students whose second language is English (L2) have increased from 37% in 2002 to 66% in 2009 (Educational Quality and Accountability Office [EQAO] 2002:11;). However, when accounting for students who were absent or deferred from the test, only 43% of L2 students were successful on the OSSLT in 2009, compared with 79% of all Ontario students (EQAO 2009a:2,14). Given the staggering differences in success rates between L2 students and non-L2 students, many questions about the test emerge. Does the language of the test negatively affect the success of L2 students? Why are L2 students 10 times more likely to obtain a deferral (a postponement from writing the test) than non-L2 students (EQAO 2009a:2, 14; EQAO 2010:1)? Additionally, little is known about the L2 students writing the test. Are students whose first language is Spanish outperforming students whose first language is Russian? Is the Ontario Secondary School Literacy Course (OSSLC), a course students can take after failing the OSSLT (EQAO 2010b), a good alternative to the OSSLT? These are the questions that have motivated this study.

The goal of this thesis is to answer the above questions as best as possible by conducting an exploratory study of the OSSLT, from analyzing the test material to interviewing teachers in an effort to inspire future research on this important matter.

CHAPTER 1:

BACKGROUND

The purpose of this chapter is to provide the reader with some background knowledge regarding the OSSLT, L2 students, and the impact of the OSSLT on L2 students.

The chapter will begin by discussing the history of the OSSLT, followed by a definition of L2 students as group. The chapter will then provide a brief description of Canada's changing demographics and how they are affecting the make-up of Ontario secondary school classrooms. Next, the chapter will investigate the performance of L2 students on the OSSLT and discuss the reasons why L2 students are failing the test at higher rates than L1 students.

I will then look at the ways in which L2 students learn literacy in the classroom, in order to pinpoint the areas of the OSSLT which may have the largest impact on their success. Finally, the last part of the chapter will discuss the notion of literacy in our society, in order to explain how society's definition of literacy has an impact on L2 students.

History of the OSSLT

The OSSLT is one of 32 requirements students in Ontario must complete in order to obtain their Ontario Secondary School Diploma (OSSD) (EQA0 2009b:5). The test is supposed to verify whether students have obtained the reading and writing skills needed to understand reading selections and communicate effectively in writing (EQA0 2008:1). While the OSSLT was first administered in the year 2000, few Ontarians are aware of the history behind the test and the provincial politics which influenced its introduction.

By early 1993, education issues were contributing to the public's growing dissatisfaction with then-Premier Bob Rae's provincial government (Gidney 1999:221-222). As a response, the government decided to form a commission on education around mid-January of 1993 (Gidney 1999:222). One noteworthy issue was standardized testing, which former education Minister Dave Cooke suggested was necessary in order to increase public confidence in Ontario's education system (Gidney 1999:223). Cooke's viewpoint was fairly accurate, as 73% of people in Ontario supported the idea of province-wide testing in 1992, which was an increase from only 59% in 1990 (Royal Commission on Learning 1994:59).

The Commission ultimately recommended that students write a literacy test "which they must pass before receiving their secondary school diploma" (Royal Commission on Learning 1994:256). The Commission rationalized their decision in the following way:

...the education system must assure 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. (Royal Commission on Learning 1994:256)

Public opinion was clearly weighing on the minds of the Commission when they made this statement, as their comments signal that the purpose of the literacy test is to re-assure Ontarians that the educational system is correctly teaching its students how to read and write. This is verified by a statement which reads:

While we want to be very clear about our lack of enthusiasm for extensive, expensive, universal testing, as opposed to sample-based assessment, we recognize the public's need for some measure of basic student achievement that is applied in the same way to every student at a few points in time. (Royal Commission on Learning 1994:255 in Gidney 1999:229)

When looking at the dwindling popularity of Bob Rae's government and the public's increased support for standardized tests, it appears that the OSSLT was born out of public opinion as a last-minute effort to appease the public and salvage votes. However, one must wonder why the demand for standardized testing emerged in society.

Perhaps part of the reason for an increased public demand for standardized tests stemmed from societal distrust in the subjectivity of evaluations completed by secondary school teachers. Nezevdal (2003) believes that one of the many obstacles in discarding standardized tests is the public's distrust of teachers (2003:73). He believes that while society trusts judges to make decisions about criminal matters, teachers are seen as less professional and not capable of making evaluative decisions about individual students (Nezevdal 2003:75). While this is possible, there are other factors that point to the increased public demand for standardized testing.

Another reason which might explain the increased public demand for standardized tests was the performance of Ontario students in a series of international, national and provincial tests and studies which showed that the students were performing at a “middle-of-the-pack” level (Royal Commission on Learning 1994:238-239). Around the same timeframe in the United States, American students performed poorly on a series of international tests, and their poor results were exacerbated by complaints from business and military leaders that secondary school graduates were becoming increasingly incompetent (Airasian 1987:54). Similar to the United States, the view that the education system was failing was well-publicized in Canada:

Echoing the parents' frustration, Canadian business executives are among the sharpest critics of the Canadian educational system, with many demanding that reading, writing and computing skills be given higher priority. George Cobbe, chief executive officer of Hewlett-Packard (Canada) Ltd. of Toronto, says that if Canadian schools do not address the problem, graduates will be unable to compete in high-technology industries. (Fennell 1993)

The preceding quotation came from a *Maclean's* cover article from January 1993. The influence of corporate executives in increasing the demand for standardized tests should not be underestimated. In Ontario, corporate executives were unified in their perspective that official benchmarks needed to be a key component of assessing students (Livingstone and Hart 1993). The mediocre performance of Ontario students on international, national and provincial tests and studies when coupled with well-publicized complaints from corporate executives clearly gave the public the perception that the education system needed change. Public distrust in the ability of teachers to evaluate students may have also added fuel to arguments which favoured the introduction of standardized tests.

In its infancy, the OSSLT was nursed by the Harris government, which easily defeated Bob Rae's government in 1995 (Gidney 1999:233). Then-Premier Mike Harris touted the

benefits of standardized tests, stating that “without standardised tests, we had no way of knowing if our kids were learning the skills necessary to succeed or how they were doing versus students in other jurisdictions” (Harris 2002). Harris also highlights the public’s apparent need for standardized exams with his claim that “businesses told us that some high-school graduates couldn't write a proper job application and that illiteracy was costing companies about \$1.5 billion a year” (Harris 2002).

Harris soldiered on with the test, and it was first administered in October 2000 without the requirement that students would need to pass the test in order to graduate (Robertson 2007:72-73). Only 61% of Ontario’s Grade 10 students passed the test in October 2000, and the Ministry of Education stated that the low success rates justified the need for the OSSLT (Robertson 2007:73). The test was then formally issued as a graduation requirement in the 2001-2002 school year (Robertson 2007:74).

As of 2009, all students who entered Grade 9 in the 2000-2001 school year have been required to write the OSSLT (EQA0 2009c:19). Success rates have increased substantially, from 75% of all students in February 2002 to 85% in April 2009 (EQA0 2005:2; 2009a:3). Historically, however, males, students with special needs (not including gifted students), and L2 students have had significantly lower success rates on the OSSLT when compared with their peers (EQA0 2009a:3, 13-15, 17-18). It appears as if the OSSLT is here to stay, as the test’s next administration dates have already been scheduled for 2010 and 2011 (EQA0 2009d). Politics and public opinion may explain the test’s continued use. Robertson (2007) believes that this is because governments can use good test results to their own advantage, and the OSSLT allows

them to appear “proactive” in education (Robertson 2007:73). This shows that public opinion has played a big part in the history of the OSSLT, from its birth to present times.

The Ontario Secondary School Literacy Course (OSSLC) has a much shorter history than the OSSLT. In the 2003-2004 school year, students who failed the OSSLT were allowed to enroll in the OSSLC (EQA0 2010b). While some might argue that the OSSLC is a convenient option for students who fail the test, the course has received a substantial amount of criticism. Winter (2004) argues that the OSSLC was created without sufficient support materials and training, and that students who are required to take the OSSLC will be unable to register in other courses (Winter 2004). Consequently, this hinders a school’s capacity to offer other courses at the senior level, which has an impact on staffing (Winter 2004). Robertson (2007) argues that the literacy course was introduced without new funding or a curriculum, and believes that the class is highly stigmatized with its students branded as two-time losers (Robertson 2007:74).

Another criticism of the OSSLC is that it represents a softening of the standards, an easy option when compared to the stress of taking the literacy test (TVO 2009). Former Ontario Education Minister Kathleen Wynne disputed this notion, arguing:

If there’s a student for whom the test is not possible but they actually can demonstrate the skills by taking the course, then why wouldn’t we want them to demonstrate those skills so that they can pass. (TVO 2009)

Thus it seems that the current government will continue to support the OSSLC, seeing it as a viable option for students who cannot pass the literacy test.

Who Gets to Define Literacy?

Is there a prevailing definition of what constitutes literacy in our society? While few would question the literacy abilities of someone who is capable of reading and understanding *King Lear*, many parents routinely question whether their teenage children are becoming sufficiently literate, due to all the time their children spend communicating with friends online. This is because knowledge of historical English plays is viewed as something intellectual and ‘proof’ that someone is literate, whereas having the literacy ability to send electronic communications to friends is seen as meaningless. At this point, we know that L2 students are having tremendous difficulties in successfully completing the OSSLT. We know that part of the reason L2 students are underperforming is due to the test’s vocabulary, as L2 students are not sufficiently clear on terms that stem from the dominant L1 culture. This leads us to wonder how literacy is defined in our society.

In 1984, Brian Street offered a new conception of literacy when he distinguished between the ideological and autonomous models of literacy (Lonsdale and McCurry 2004:7). It was so influential that Lonsdale and McCurry (2004) argue that many conceptions of literacy are variations of Street’s work, and Postill (2003) states that the ideological model itself enjoys a paradigmatic status today (Lonsdale and McCurry 2004:7; Postill 2003:86). The ideological model is a departure from the autonomous model of literacy, which maintained that literacy development can be traced in a single direction, and that literacy is associated with civilization, progress, and social mobility (Street 1984:8). The ideological model is composed of critiques of the autonomous model, and holds that literacy is embedded in social institutions which affect the

meaning of literacy, and that literacy cannot be separated from its ideological and political significance (Street 1984:8). The model also maintains that practices of writing and reading rely on parts of the social structure, including social stratification and the purpose of educational institutions (Street 1984:8). In order to further one's understanding of how literacy is defined under the ideological model, it would be useful to look at an application of the model.

A literacy campaign involving Tanzanian farmers shows how the ideological definition of literacy is applied in practice (Street 1984:183, 188, 190). An environment where reading groups met to share experiences and trade books motivated illiterate individuals to attend literacy classes, because the classes were able to provide attendees with evidence that literacy is valuable for rural life (Street 1984:194). Proponents of this approach realized that literacy is rooted in ideology and culture, and that literacy can only be adopted if it is noticeably relevant to the culture and ideology of the people who adopt it (Street 1984:195). This relates to one aspect of Street's ideological model outlined above, in that literacy is only known in forms that have ideological and political significance. The farmers became interested in literacy only when they saw how it could benefit their rural lifestyle.

Street's ideological conception of literacy is largely social, in that it shows how literacy is influenced by society and embedded in culture. However, what happens when the literacy of one cultural group comes into contact with the literacy of another culture group? Barton (1994) believes that schoolchildren have learned the literacy practices of their community, and that literacy practices play a role in discovering how meaning is constructed within their community (Barton 1994:183-184). However, Barton states that the ways the minority child has learned to

construct meaning will be of little use once they enter school (Barton 1994:184). Barton's work indicates that the dominant culture's definition of literacy will be imposed in the school system, which will disregard the literacies of linguistic minorities, leaving them to engage in their literacy practices at home or in their community. At the same time, if parents of L2 students over-rely on home and community literacy practices relevant to the student's native tongue, then the L2 student may not have a sufficient amount of time to interact with the English language and become fully literate, as the aforementioned research suggested (Schumann 1986:381). For instance, a student whose first language is Cantonese will not be permitted to write stories in Cantonese in their secondary school English class. However, when they get home, they might be encouraged to read novels written in Cantonese, or participate in a language school to improve their reading and writing skills in Cantonese. If the student or their parents overemphasize the student's progress in Cantonese, it will not allow the student sufficient time to learn how to sufficiently read and write in English. Barton's work thus shows us how many different forms of literacy exist, and some of the problems that can occur when different literacies come into contact with one another.

The literature above has shown how the definition of literacy differs depending on certain contexts, but the contexts have been largely spatial. Cunningham (2000) discusses how the definition literacy can change across time, as he believes that profound changes in society have an impact on the definition of literacy (Cunningham 2000:64). In the 21st century, new technology is playing a fundamental role in society and has had a significant impact on the way people go about their daily lives and communicate with one another. This has been especially true for high school students. The 2008-2009 questionnaire on the OSSLT found that 95% of

females and 90% of males read material on the internet, compared with only 72% of females and 67% males on the questionnaire administered on the 2000-2001 version of the OSSLT (EQAO 2009a:8; EQAO 2001:3). For high school students today, computer literacy is an important skill that is essential for effective communication with peers.

Cunningham notes the importance of technology in today's world. He argues that the increase in books recorded for listening purposes means that the definition of literacy will need to be expanded in order to include listening (Cunningham 2000:64). For Cunningham, the Internet represents a fast-growing contemporary example of contextualized reading and writing, which is noteworthy as literacy involves contextualizing reading and writing within society's expectations (Cunningham 2000:64). Additionally, the accessibility of hate speech and various religious and political views on the Internet will require an increase in the teaching of critical literacy (Cunningham 2000:65). Critical literacy involves having the individual form their own unique ability to analyze and produce a variety of texts, instead of just passively reading and accepting texts that support the beliefs of dominant institutions and social relations (Young 2000:312).

Cunningham's definition of literacy addresses components of Street's ideological model. His definition includes the fact that reading and writing practices are dependent on educational institutions, as he believes that teachers will need to teach students how to properly digest and understand the myriad of conflicting opinions and commentary found on the Internet. Cunningham's viewpoint ultimately represents an approach to literacy that integrates aspects of

Street's ideological model and accounts for technological changes that have occurred in society. It is thus clear that the definition of literacy can change depending on time and space.

In lieu of the information above, we must consider how the Ontario government defines literacy in an era where technology is transforming cultural and educational practices. The goal of the test is to ensure that students have “the literacy (reading and writing) skills required to meet the standard for understanding reading selections and communicating in a variety of writing forms expected by *The Ontario Curriculum* across all subjects up to the end of Grade 9” (EQAO 2008:1). Consequently, the provincial government's definition of literacy seems to be somewhat linear, as it assumes that students will progress through the school system and be confirmed as literate when they complete the OSSLT. This seems to fit in with the autonomous definition of literacy, especially when one considers the history of the OSSLT and how passing the test seems to be viewed as a necessary factor for obtaining success in post-secondary education and the workplace.

At the same time, the test's definition of literacy notes that students are expected to have achieved a standard of literacy based on their knowledge of all subjects. Is it possible that the test is acknowledging that there are multiple forms of literacy? In order to achieve a secondary school diploma in Ontario, students are required to obtain credits in English, mathematics, science, Canadian history and geography, health and physical education, and other subjects (Ottawa-Carleton District School Board [OCDSB] 2009:2). Technological education is not part of the list of mandatory credits that students must obtain in order to graduate (OCDSB 2009:2), in spite of the importance of computer literacy for secondary school students in today's society.

By not acknowledging the importance of technology in its definition of literacy, the test has disregarded important societal changes which have transformed the definition of literacy. This makes the test's definition of literacy less ideological, since the ideological definition of literacy is embedded in culture and accounts for the changes that occur in society. Through investigating the content of the OSSLT, we will be able to further determine the degree to which the test's definition of literacy is autonomous or ideological, and the impact that this definition has on L2 students writing the test.

Who are L2 Students?

Defining L2 Students as a Group

L2 students are students who are learning English as a second language (Fox and Cheng 2007:10). In Ontario, the curriculum defines L2 learners as either English as a Second Language (ESL) students, or English Literacy Development (ELD) students (Cheng, Fox, and Zheng 2007:70). ESL students are proficient in their first language (L1) with respect to reading and writing, and have also received continuous schooling prior to their arrival in Canada, whereas ELD students are incapable of reading and writing in their first language and might have not received continuous schooling (Cheng, Fox and Zheng 2007:70). For the purposes of the thesis, L2 students will refer to any second-language student who is in the process of completing their high school diploma in Ontario, regardless of how proficient they are in English.

L2 students come from a myriad of linguistic and cultural backgrounds. According to the Ontario Ministry of Education, the majority of L2 students entering secondary school were born outside of Canada (Ontario Ministry of Education 2007a:5). However, many L2 students were born and raised in Canada, but grew up in home environments where English was not spoken (Ontario Ministry of Education 2007b:8). These include Aboriginal students who have a first language other than English, students from communities that have a unique linguistic tradition but who attend schools where the primary language is English, such as Francophone students, and students born in “immigrant communities” where English is not the primary language (Ontario Ministry of Education 2007b:8-9). L2 students also include immigrants who have arrived in Canada voluntarily, as well as newcomers who arrived in Canada due to war or other crises that occurred in their home country (Ontario Ministry of Education 2007b:9).

Although statistics on the linguistic backgrounds of L2 students were not available, I did manage to retrieve some statistics from the 2006 census that provide an overview of the linguistic makeup of Ontario’s L2 population. The largest proportion of Ontario’s second-language population has Italian as a mother tongue (282,750), with Cantonese having the second-highest proportion (181,820), and Filipino, Urdu, Arabic, German, Polish, Spanish, Portuguese, and Punjabi all having at least 100,000 respective native speakers (Statistics Canada 2006). However, when it comes to languages other than English and French, Cantonese was found to be the language that was most often spoken in Ontario homes (154,315), followed by Punjabi (117,445), and Italian (107,170) (Statistics Canada 2006). Additionally, there were at least 50,000 respective Persian, Portuguese, Spanish, Polish, Russian, Arabic, Urdu, Tamil, Vietnamese, Mandarin and Filipino individuals speaking their native language as the primary

language spoken at home (Statistics Canada 2006). This tells us that in Ontario, individuals whose second language is English are from a variety of linguistic backgrounds, but the majority of L2 citizens have backgrounds stemming from Western Europe and Asia.

While we cannot generalize these findings to L2 students in Ontario secondary schools, the demographic information on L2 citizens indicates the diversity of the group, since there is no dominant linguistic group whose mother tongue is not English or French. It is also noteworthy that 85% of individuals whose native language is Cantonese speak Cantonese primarily in the home, along with 77% of individuals whose first language is Punjabi, and 75% of individuals with Russian as a mother tongue (Statistics Canada 2006). This is in comparison with 38% of individuals whose native language is Italian, 27% of individuals with German as a mother tongue, and 9% of individuals whose native language is Dutch (Statistics Canada 2006). Again while we cannot generalize, these findings give us an indication of the likelihood that an L2 student of a certain linguistic background will be more likely to encounter their first language regularly in the home.

Relative to their L1 peers, L2 students are a significant minority in Ontario secondary schools. In 2009, there were 152,830 students writing the OSSLT for the first time, including absent and deferred students (EQAO 2009a:2). L2 students composed only 4% of these students (EQAO 2009a:14). However, board-wise, L2 students form slightly more significant numbers. Again, referring to students writing the OSSLT for the first time, L2 students composed 11% of all students in the Toronto District School Board (TDSB), and 10% of all students in the Toronto Catholic District School Board (TCDSB) (EQAO 2009e:2, 9; EQAO 2009f: 2, 9).

After checking board statistics for Ottawa, York Region, and Peel Region, I was not able to find student populations with a substantial proportion of L2 students writing the test for the first time. However, when looking at the number of previously-eligible students who were taking the test, L2 students formed more significant numbers. Previously-eligible students are defined as students “who were absent, deferred, or not successful during a previous administration, and who are working toward an OSSD,” (EQA0 2009a:47). Previously-eligible L2 students composed 14% of all previously eligible students in Ontario (EQA0 2009g:4, 7). When looking at the Toronto-area school boards, L2 students composed 28% of all previously-eligible TDSB students, and 30% of all previously-eligible TCDSB students (EQA0 2009g:4, 7; EQA0 2009h:4,7). In total, L2 students compose 7% of all students who are writing the test, including both students writing the test for the first time and previously-eligible students (EQA0 2009e:2, 9; EQA0 2009g:4, 7).

However, some researchers warn that we must be careful with interpreting these numbers and making any definitive statements about L2 students. Fairbairn and Fox (2009) note some of the problems with defining L2 students as a group (2009:10). They argue that many L2 students are not officially recognized, such as students born into immigrant communities who enter the school system speaking English as their first language (Fairbairn and Fox 2009:11). Oftentimes, these students do not have enough proficiency in English to use the language for academic purposes (Fairbairn and Fox 2009:11). Another issue is that it is difficult to define the L2 student population at any given time, because learners with little English proficiency are moving into the group at the same time as advanced learners are exiting

the group (Fairbairn and Fox 2009:11). Additionally, school boards may push for more L2 students to be moved into mainstream classes, which takes them away from receiving the language support they would normally obtain when defined as part of the L2 group (Fairbairn and Fox 2009:11).

The work of Fairbairn and Fox tells us that L2 students may exist in significantly greater numbers in Ontario schools than the information from the EQAO suggests. At the same time, there are some generalizations we can make about L2 students as a group.

From the information above, we can deduce that students who are defined as L2 students make up a small proportion of students in Ontario's secondary schools. At the same time, as the work of Fairbairn and Fox suggested, L2 students may form a significantly larger portion of school populations than the numbers above indicate. Whatever the case, they are a diverse group of students, coming from a large range of linguistic and cultural backgrounds and having varying levels of proficiency in English. Some L2 students were born in Canada and raised in families where English was not the predominant language, and some have arrived in Canada due to unfortunate circumstances that forced them to leave their homeland. However, as we will see in the next section, L2 students are a growing group and Ontario could soon be faced with a large number of L2 students who need to pass the OSSLT in order to graduate.

Changing Demographics

Canada is currently faced with the issue of an aging population coupled with a low fertility rate, which has inevitably resulted in immigration fuelling population growth (Durst 2005:258; Statistics Canada 2007). Canada's median age climbed to 39 years in 2007, and it is estimated that by the year 2050 more than a quarter of Canada's population will be aged 65 and older (McDaniel 2009:39; Organization for Economic Cooperation and Development [OECD] Factbook 2007 in McDaniel 2009:39, 60). From 2000-2006, Ontario's total fertility rate has hovered between 1.47 and 1.52 (Statistics Canada 2008a). The total fertility rate refers to a woman's average number of children, and any rate below 2.1 means that Ontario is not ensuring the replacement of its population over a long period of time (Statistics Canada 2008b; Statistics Canada 2008c). Consequently, immigrants will need to fill the population gap. Ontario's consistently low fertility rates indicate that immigrants will play a vital part in sustaining the province's population.

Many newcomers choose to settle in Ontario upon arriving in Canada. In 2007-2008, Ontario received approximately 46% of Canada's 249,603 newcomers (Statistics Canada 2009). Immigrants may bring children with them to Ontario, or decide to have children upon settling in the province. In 2007-2008, Ontario received 19,851 immigrants who ranged from 5 to 17 years of age (Statistics Canada 2009). This means that every year, Ontario receives a large number of new immigrants who may have to write the OSSLT one day, and these newcomers will need to be sufficiently proficient in the English language in order to obtain their high school diploma.

Upon moving to Ontario, children face the challenging burden of mastering the English language for educational, social and cultural purposes. According to the Ontario government's English as a Second Language (ESL) curriculum, students may need anywhere from five to seven years to become sufficiently fluent in English (People for Education 2002:4). Eventually, children who have immigrated to Ontario and entered the school system will have to write the OSSLT in order to successfully complete high school. The Ontario government needs to ensure that younger immigrants have attained a level of English that enables their success on the OSSLT, so that they can successfully graduate from high school and enter the labour market in order to ascertain Ontario's place as a prosperous and competitive province.

L2 Success Rates on the OSSLT

As previously discussed, the OSSLT became a graduation requirement for all students who entered Grade 9 in the 2000-2001 school year. These students, assuming they completed Grade 9, would have written the OSSLT in the 10th grade during the 2001-2002 school year, with their high school diploma hinging on their successful completion of the test.

Since 2001-2002, L2 students have failed the OSSLT at rates significantly higher than their L1 counterparts. However, the achievement gap between all students and L2 students has narrowed over time. In terms of students who wrote the test for the first time, there was only a 19% success rate difference between all students and L2 students in 2008-2009, compared with a 38% success rate difference in 2002-2003 (EQAO 2009a:2, 14; EQAO 2005:2, 11).

Nevertheless, the 19% difference is noteworthy. A whole third of L2 students failed the literacy test in 2008-2009 (EQAO 2009a:14), which means they risk losing their diploma if they cannot pass the OSSLT or OSSLC. The results for students re-taking the test are not promising. In 2008-2009 alone, only 54% of students who were previously eligible for the OSSLT were successful (EQAO 2009a:4). These results have hovered from 50%-55% between March 2006 and April 2009 (EQAO 2009a:4). This means that the 33% of L2 students who failed the literacy test may not pass the OSSLT a second or third time when given the opportunity, and may have to drop out or find a school that offers the OSSLC.

In addition to failing the tests at much higher rates when compared with their L1 counterparts, L2 students also have significantly higher deferral rates. 4% of all students were deferred in 2008-2009, compared to 32% of L2 students (EQAO 2009a:3, 14). Since October 2004, deferral rates have hovered between 30%-37% for L2 students and 3%-4% for all students (EQAO 2009a:3, 14).

In order to obtain a deferral, the parent of an L2 student needs to make a written request directed to the school's principal, or the principal can suggest a deferral (EQAO 2010a:10). L2 students who are not sufficiently proficient in the English language can obtain a deferral (EQAO 2010a:10). As previously noted, the Ontario government's own curriculum for ESL students recognizes that it will take 5-7 years for newcomers to fully master the English language. L2 students who are initially deferred might not pass the test when they are eventually eligible to write it, as indicated by the poor success rates for previously eligible students. Consequently, they may have to find a school that offers the OSSLC in order to obtain their diploma.

While no provincial statistics on OSSLC success rates are available, individual boards are publishing their OSSLC success rates. In the first semester of 2004-2005, 86.6% of students who took the OSSLC with the TCDSB successfully completed the course (Fenwick et al. 2005:17). The Ottawa-Carleton Catholic School Board (OCCSB) had an OSSLC success rate of 94.9% for the 2005-2006 school year (Miller 2006:85). These numbers may give refuge to the aforementioned claim that the OSSLC represents a softening of the standards, however the success rates are not reliable as it seems that school boards are not required to produce statistics for the OSSLC. This is somewhat problematic, as it appears that not all boards keep statistics on the OSSLC. Additionally, these numbers are not broken down in order for us to isolate L2 students and see how they as a specific group performed on the OSSLC. Perhaps boards with dismal OSSLC success rates do not publish their statistics. Alternatively, the high success rates of students in the TCDSB and OCCSB may mean that the OSSLC is a reasonable alternative which allows students to move forward and obtain their diploma. We can only assume since there is no evidence of province-wide success rates for the OSSLC.

However, one thing we can be sure of is that the OSSLC is not offered at every school across Ontario's major urban centres, such as Ottawa. The OSSLC is only offered at 9 of Ottawa's 26 public secondary schools for 2009-2010 (OCDSB 2009:26, 38, 56, 60, 65, 86, 98, 102, 125). This may pose problems for L2 students and others registered at a secondary school that does not offer the OSSLC. Alternatively, the course is offered in the summer with the Ottawa public school board, however the course could be cancelled if there are not enough students enrolled (OCDSB 2010:2). If other boards in major urban centres offer the OSSLC in a

similar fashion to Ottawa's public school board, then L2 students may not receive the opportunity to take the OSSLC and will risk failing the OSSLT an additional time. They may end up leaving school because they do not want to bother staying for another year and waiting for the test's next administration. Consequently, it is difficult to determine L2 success rates on the OSSLC, since we do not have specific success rates for L2 students, nor can we be sure that they will even obtain the opportunity to take the course.

Upon seeing the chart of L2 success rates, one must wonder why L2 students are failing the OSSLT in such high numbers. Academics have conducted a number of studies which indicate a wide range of factors that impede an L2 student's success on the OSSLT.

Fox and Cheng (2007) discovered issues with the wording of questions in the March 2006 version of the OSSLT that placed L2 students at a disadvantage (Fox and Cheng 2007:17). When asked for written responses to subjects such as junk food and inventions, L2 students did not write a response because they could not interpret the specific meaning of words such as "junk food" or "inventions" (Fox and Cheng 2007:17). When the terms "junk food" and "inventions" were explained to L2 students, they could easily formulate responses to the written task (Fox and Cheng 2007:17). Fox and Cheng consequently argue that the OSSLT is testing vocabulary and not writing (Fox and Cheng 2007:17). The Canadian Oxford Dictionary defines junk food as "food with low nutritional value", however the same dictionary defines "junk" as "anything regarded as useless or of little value" (Barber 2004a; 2004b). It would be very easy for someone with limited proficiency in the English language to misinterpret a question regarding the dangers of junk food in a number of ways, as an L2 student might think that the question is asking them

to explain why food is of little value. Fox and Cheng have thus showed how the use of certain vocabulary terms can hinder the success of L2 students on the OSSLT.

In addition to Fox and Cheng's work, Cheng, Klinger and Zheng (2007) found that L2 students in 2003 had the most difficulty with vocabulary when writing the OSSLT, and that vocabulary resulted in the largest performance gap between L2 and L1 students (Cheng, Klinger and Zheng 2007:195-196, 194).

The literature above ties into an important notion of what society values as literacy, as research shows that L2 students struggle with vocabulary terms found on the OSSLT. The work of other researchers shows that conflicting definitions of literacy have negatively affected L2 students. For instance, a schoolteacher in Toronto explained how there are many students who fail the literacy test, but at the same time can name every component of a car and memorize the lyrics to many songs (Gallagher 2007:12-13). This anecdote can be corroborated by a 2009 study which showed that L2 students who failed the OSSLT were more likely to have written English-language songs or stories after school as opposed to L2 students who passed the OSSLT, who were more likely to have read English-language novels and material on the Internet written in English (Cheng, Klinger and Zheng 2009:133). This suggests that the OSSLT may value one form of literacy over another, as students who are familiar with English literature will outperform students who are capable of writing songs and short stories. The notion of what society values as literacy will be discussed further in the next section of the background chapter, which looks at how literacy is defined in society.

Some research findings support the idea that L2 students may be failing the OSSLT because the content of the test reflects some features of the L1 majority and may thereby have a negative impact on L2 students. Majhanovich (2002) found that the OSSLT quizzed students on local and current events, which could affect the progress of L2 students (Majhanovich 2002:166). Indeed, research published by Duff (2001; 2002) and Harklau (1994) supports the notion that L2 students are not as familiar with current and local events when compared with L1 students.

Duff (2001) looked at challenges faced by L2 students at a Canadian secondary school with a large population of L2 students (Duff 2001:110-111). In one course, a third of classroom time was devoted to discussing current events, where students were required to provide written summaries of newspaper articles (Duff 2001:116). Duff found that L2 students did not participate in open class discussions on the subject of current events, as participation was dependent on familiarity with places, people and events that are discussed in the English language (Duff 2001:116). Topics often included references to pop culture and sports scores, and L2 students with a lack of English comprehension could only understand particular words (Duff 2001:116). In order to understand the words used in the discussions, L2 students needed to seek information from a peer or parent, which either delayed or prevented their comprehension of the words used in class discussions (Duff 2001:116-117).

On top of needing the ability to read newspapers, L2 students needed pop-culture literacy from magazines and other varieties of media (Duff 2001:117). Duff found that L2 students were burdened with English lessons outside of the classroom, and did not have much time to consume

pop culture from sources such as television and radio (Duff 2002:485). Additionally, the families of L2 students subscribed to non-English language magazines and watched non-English television programs (Duff 2002:485). Although both L1 and L2 students enjoyed the use of an online chat network, L2 students spoke to friends in their native languages, whereas L1 students spoke nearly exclusively with their local L1 friends (Duff 2002:485). This was problematic as L2 students had significantly lower cultural knowledge than their L1 counterparts (Duff 2001:117-118).

Harklau (1994) also found cultural knowledge to be an issue when she explored the experiences of L2 students at a secondary school in San Francisco, California (Harklau 1994:243, 267). Harklau found that immigrant students did not often have the same familiarity with American pop culture when compared with native speakers (Harklau 1994:263). Harklau also found it noteworthy that L2 students in mainstream classes did not receive a lot of interaction with their L1 peers (Harklau 1994:262-263).

Duff's work highlights the disadvantages L2 students face when confronted with a curriculum that stresses current and local events, as well as pop culture. Additionally, both Harklau and Duff point out the important issue of L1 students having a distinct upper hand in cultural knowledge that is reinforced by consistent communication with other L1 students. Consequently, when L2 students who write the OSSLT are confronted with words and concepts that reinforce the dominant culture, they will likely be less successful on the OSSLT when compared with L1 students. The aforementioned work of Fox and Cheng (2007), as well as Cheng, Klinger and Zheng (2009) shows that vocabulary is a large problem for L2 students with

respect to the OSSLT, and in one study, resulted in the biggest performance gap between L1 and L2 students. The above literature highlights the vocabulary of the OSSLT as an important issue that the thesis will further investigate.

L2 Students and Second Language Acquisition

It is important to discuss research on the ways in which L2 students learn literacy in the classroom, in order to help guide the content analysis of the thesis which seeks to determine how the OSSLT measures the literacy skills of L2 students. Some of the issues surrounding second language acquisition for L2 students include differences between school and home literacy practices, issues with learning how to read and write, as well as the notion of adapting to a new culture and how it affects second language acquisition.

One body of work makes note of the problems that exist when the literacy of the school comes into contact with the literacy of a community. Pérez (1998a) believes that literacy and language are socially constructed, in that the meaning of a certain language will be constructed and interpreted by the users of the language (Pérez 1998a:26). Many students develop a set of literacy skills which are unique to their community (Pérez 1998a:27). Linguistically diverse groups will interpret texts and apply literacy in a way that will reflect their own cultural experiences, which may come into conflict with the school's literacy practices (Pérez 1998a:27). For instance, Collins and Blot (2003) found that children of a certain community had social and language behaviors which were manifestations of what that they had successfully acquired in their community (Collins and Blot 2003:41). However, the work of these children was deemed

inadequate by their school, despite their apparent language competence (Collins and Blot 2003:41).

As we saw in a previous section of this chapter, Fox and Cheng found that L2 students were perfectly able to respond to questions on the OSSLT, but were thrown off by vocabulary terms such as “junk food” (Fox and Cheng 2007:17). As a native Canadian who heard the term regularly while living at home, seeing it on a literacy test would pose no problems for me. My knowledge of the term reflected my own cultural experiences and that of my English-speaking community, with descriptions of fast food and potato chips including terms such as “junk food” and “garbage”. But for someone with limited proficiency in the English language who does not encounter the term regularly at home or in their community, “junk food” would make little sense.

When learning to read in English, L2 students are at an immediate disadvantage when compared to their L1 counterparts. Laufer (2003) states that reading is the primary source of an L1 student’s vocabulary growth, and high school graduates whose mother tongue is English are familiar with approximately 32,000 words (which the author believes is a modest estimate) (Laufer 2003:568). In the case of L2 students, Pichette (2005) believes that while it is generally accepted that extensive reading benefits vocabulary acquisition, researchers are discovering that the process of acquiring vocabulary through reading is gradual, and some studies show no marked vocabulary benefits as a result of extensive reading (Pichette 2005:244-245).

Block (1995) also seems to advocate moving away from reading as the only form of language acquisition. She critiques Krashen’s second language acquisition theory, which

suggested that reading is the single method in which people develop a quality writing style, obtain advanced grammar and a sufficient vocabulary, as well as become good spellers (Block 1995:10-11; Krashen 1993:23 in Block 1995:10). Block questions this theory, noting that the association between pleasure reading and producing written language is questionable (Block 1995:13). Instead, she argues that many in the field support the prudent approach of emphasizing both reading and writing at an equal level (Block 1995:13).

As an alternative to Krashen's viewpoint, Block's article on the literacy development of L2 students argues that "using reading alongside writing can help in the development of writing skills," (Block 1995:15). Reading allows students to note the stylistic choices of expert writers, such as introducing main points, using lead-in phrases, and shifting topics between paragraphs, while students who write as they read will develop reading skills by making notes in order to form their own interpretations of the reading material (Block 1995:16). Consequently, Block is advocating an approach to L2 reading comprehension that involves both reading and writing, as integrating the two practices will improve the reading skills of L2 students. The literature in this field thus seems to discard the idea that reading is the only method for students to successfully acquire a second language.

Acquiring literacy in a second language involves the transferring of skills from the mother tongue to the language being learned (Pérez 1998b:60). Many L2 students, assuming they are literate, first developed writing in their mother tongue before entering the school system (Pérez 1998b:62). One problem students run into when learning how to write in a second language is the association of symbols with an unfamiliar sound system (Pérez 1998b:59-60).

The transfer process will be different for L2 students depending on their native land, Russian students accustomed to the Cyrillic alphabet will learn new associations for symbols that are somewhat similar to Russian, whereas Chinese students will barely transfer any skills due to the fundamental differences between the Chinese and English languages (Pérez 1998b:60).

Additionally, writers of Semitic languages (such as Arabic and Hebrew) are accustomed to reading and writing from right to left, meaning that learners who have a Semitic language as their mother tongue will face a unique task when becoming literate in English (Pérez 1998b:60).

Alternatively, when the L2 student's mother tongue uses the Roman alphabet, identifying symbols and learning to write is relatively easier (Pérez 1998b:59).

Ionin, Zubizarretta and Maldonado (2008) elaborated on the issue of transferring skills with a study that looked at how L2 speakers used English articles (Ionin, Zubizarretta and Maldonado 2008:554). Grammatically speaking, articles refer to words that indicate whether or not a noun is definite (Microsoft Corporation 1998-2007). For instance, when looking at a set of words such as "the pen on the desk", *the* refers to the definite article, whereas *an* and *a* are indefinite articles (Barber 2004c; 2004d; 2004e). Typically, L2 learners misuse or omit English articles, and these errors are more common amongst learners who have a mother tongue that lacks the use of articles (Ionin, Zubizarretta and Maldonado 2008:555). In general, these sorts of errors are made with greater frequency amongst languages without articles, such as Japanese or Korean, as opposed to languages such as Spanish (Ionin, Zubizarretta and Maldonado 2008:555). Ultimately, Ionin, Zubizarretta and Maldonado found that L2 learners whose first language was Spanish were more accurate with their article use than L2 learners whose mother tongue was Russian, and the researchers attribute this to the importance of transferring literacy skills from

one's first language (Ionin, Zubizarretta and Maldonado 2008:569). This indicates to us that at least with respect to articles, Spanish learners of English have less difficulty than Russian learners of English, and this is attributable to the learner's mother tongue.

Fitzgerald (1993) also notes that when learning how to write in English, L2 students do not always have sufficient background knowledge in English with regards to vocabulary meaning and specific content, meaning that teachers should devote extra time to increasing the background knowledge of L2 students (Fitzgerald 1993:640-641). The issue of L2 deficiencies in background knowledge and vocabulary continue to be a recurring theme in the literature surrounding the literacy abilities of L2 students.

The notion of adapting to a new culture is also central to a discussion of how L2 students acquire a second language. Gunderson (2009) describes culture as "the ideas, customs, language, arts, skills and tools that generally characterize a given group of individuals in a given period of time," (Gunderson 2009:81). Gunderson believes that students do not simply walk into a new culture and become bicultural, instead they adapt and reject some aspects of the new culture while holding on to features of their original culture, eventually becoming socialized in a way that is exclusively individual (Gunderson 2009:81). While this theory is tenable, it does little to indicate to us some of the marquee social and psychological factors that are involved in second language acquisition. Instead, we must look all the way back to Schumann (1986) for such a discussion.

Students in a classroom will not all absorb information in the same way, due to both social and individual factors. For instance, in any classroom there are students who are highly motivated. Their motivation could be a result of parental pressure, which stems from a culture that values formal education, or a strong internal desire to achieve success in school in order to get ahead. Schumann (1986) outlines both social and psychological factors that affect the degree to which students will be successful in learning a second language, in the context of adapting to a new culture.

One social factor Schumann mentions is enclosure, which he defines as the amount of activities and institutions L1 and L2 groups share (Schumann 1986:381). For instance, if L1 and L2 groups go to the same churches, schools and engage in similar recreational activities, then the groups will have increased contact with one another which will increase the opportunities for L2s to acquire the second language (Schumann 1986:381). However, if the L1 and L2 groups do not share many activities or institutions, then they will have a limited amount of contact with each other which inevitably reduces the L2 group's opportunity to acquire the second language (Schuman 1986:381).

There are other social factors Schumann mentions, but they seem to invariably lead to the idea that successful second language acquisition requires sufficient contact with the L1 group. This has problematic implications, as the studies conducted by Duff and Harklau indicate that L2 students are hesitant to engage with their L1 peers.

The implications of Schumann's work on social factors are fascinating. Do socially ostracized students have a lower chance of acquiring a second language? In my own experience tutoring adults learning English as a second language, students of Arabic descent (who form the majority of the students in the classroom) often communicate regularly to each other in their mother tongue, even during classroom time. Because they are regularly communicating with each other instead of with students who are trying to speak English, they are limiting their opportunities to become fluent in English. While there are exceptions, I've noticed that these students seem to progress slower than others, including students of Vietnamese and Chinese descent, who also have to work with a completely different alphabet. Additionally, the least successful student in the class has isolated himself from his peers and has focused on independently studying the English language, translating English vocabulary into his native language and then attempting to memorize each new word he comes across. While social factors certainly play a role in learning English as a second language, Schumann's research on individual factors involved in second language acquisition may point out additional reasons as to why some L2 students struggle more than others when it comes to learning English.

Schumann mentions language shock as one of the variables which influence second language acquisition (Schumann 1986:382). Language shock refers to a person's fear of being ridiculed when attempting to speak a new language (Schumann 1986:382). He notes that children are typically less worried than adults about misusing words in the new language (Schumann 1986:382). Teenagers are young adults, and the aforementioned work of Duff indicates that L2 students enrolled in secondary school do possess a certain amount of fear when speaking out in

class. This may also be related to the extent to which the individual is introverted or extroverted, and their prior experiences in speaking the language and the amount of support they received.

Another individual factor Schumann mentions is culture shock, which he defines as “anxiety resulting from the disorientation encountered upon entering a new culture,” (Schumann 1986:383). One of the more negative aspects of culture shock is that the learner becomes dependent on others, as trivial tasks in the learner’s home country will be much more strenuous in the new country (Schumann 1986:383). This takes the learner’s attention away from the second language, as their effort will be devoted towards performing these now difficult tasks (Schumann 1986:383).

Culture shock seems to be a very significant issue in learning a second language, and Schumann seems to believe that it creates a barrier to second language acquisition. This certainly seems plausible, as even going to the corner store would be a challenge if the newcomer did not understand the language of the L1 group. Indeed, the Canadian government provides coping strategies for culture shock on its travel information website, warning Canadians that they may experience symptoms ranging from anger to self-inflicted social isolation (Foreign Affairs and International Trade Canada 2010). Canadians are not unique to the phenomenon of culture shock, and many newcomers likely experience some of these symptoms when arriving. If they are isolating themselves as a result of culture shock, then it seems perfectly logical that they will not be as willing to learn a second language. This might be especially problematic in cohesive L2 communities, which Schumann feels will limit the amount of opportunities L2s have for learning the second language as the group will remain separate from the L1 group (Schumann 1986:381-

382). Schumann has thus shown a number of complex social and psychological factors which affect an L2 student's second language acquisition.

The social group of an L2 student may be cohesive, which as Schumann pointed out will limit the opportunities for the L2 student to learn a second language. As Duff pointed out, L2 students may go home and communicate with others in their native language, whereas L1 students will go home and reinforce their knowledge of current and local events, as well as the latest trends in pop-culture. This is why it is crucial to look at the content of the OSSLT, in order to explore whether the test is using vocabulary terms that place L2 students at a disadvantage. This is especially important when research in this section of the background chapter has pointed out that L1 students already have a much stronger vocabulary than L2 students, and that L2 students need a greater amount of background knowledge when learning how to write in English.

The purpose of this chapter was to provide some historical information about the OSSLT, as well as present some of the key issues L2 students face when learning a second language and when writing the OSSLT. The chapter sought to provide the reader with a sense of some of the difficulties L2 students face as a result of the OSSLT, due to both problems they face when learning English as a second language and adapting to society's definition of literacy. In the following chapter, the thesis will move on to explain the best ways to uncover some of the specific difficulties and challenges that the OSSLT poses for L2 students.

CHAPTER 2: METHODOLOGY

The purpose of this chapter is to clarify the thesis' methods of investigating the OSSLT, including procedures for the thesis' content analysis and interviews.

Content analysis and interviews were used as ways of exploring the impact of the OSSLT on L2 students. The content analysis measured the readability of two versions of the OSSLT using two different computer tools. The Coh-Metrix 2.0 tool was used to analyze the readability of the reading passages of the tests, and the VocabProfile tool was used to explore the words used in the multiple choice and short answer questions of the test. This chapter will explain why these tools are the most effective for uncovering areas of the OSSLT that are problematic for L2 students.

Semi-structured interviews with four current Ontario secondary school teachers and one retired secondary school teacher were undertaken in order to provide answers to some of the thesis' original research questions, including the reasons why so many L2 students are deferred from taking the literacy test, whether there are differences on OSSLT success rates based on students' cultural and linguistic backgrounds, and the effectiveness of the OSSLC as an alternative to the OSSLT. Finally, open coding was used in order to analyze the interview data.

Content Analysis

Materials Analyzed

The materials analyzed for the content analysis included released sections of the OSSLT from the 2007-2008 and 2008-2009 school years. These materials are provided by the EQAO and contain actual questions from the test (EQAO 2009i).

Each copy of the released versions of the test contains twelve sections, the last of which is a student questionnaire. The released version of the OSSLT for 2008-2009 contains 38 multiple choice questions, four reading passages, as well as eight short and long answer questions. The released version for 2007-2008 also contains 38 multiple choice questions, four reading passages, and eight short and long answer questions.

The OSSLT for 2009 asks students to do anything from defining vocabulary to expressing opinions, with questions such as “What word would best replace the word “caretakers””, and “Is it a good idea for high school students to have a part-time job?” Students are required to answer questions based on reading passages, as well as answer questions that are concerned with proper grammar use.

All questions from both tests are available on the website for the EQAO (<http://www.eqao.com>). Results from the Coh-Metrix and VocabProfile operations can be found in the findings chapter.

Analyzing the Data

What is Readability?

Readability refers to the amount of difficulty in a text and is associated with assessing texts for their complexity (Graesser et al. 2004:198). *Flesch Reading Ease* and the *Flesch-Kincaid Grade Level* are the most frequently used methods of assessing readability (Graesser et al. 2004:199). *Flesch Reading Ease* employs a formula that assesses text difficulty based on parameters such as average sentence length and the average number of syllables for each word (Graesser et al. 2004:199). *Grade Level* simply transfers the text's score from *Ease* into a score associated with the United States' school grade system (Graesser et al. 2004:199).

McNamara, Louwse and Graesser (2003) argue that these formulas rely heavily on word and sentence length to assess the difficulty of a text, meaning that textbook publishers needing to achieve a certain grade level for a text can lower the *Flesch-Kincaid Grade Level* by simply reducing the length of the words and sentences found in the book (McNamara, Louwse and Graesser 2003:2-3). While this would achieve a lower grade level, the book may become more difficult for the reader to read because texts with short sentences may be problematic for readers with a low amount of reading proficiency and domain knowledge (McNamara, Louwse and Graesser 2003:3). This occurs because texts that are simplified by shorter sentences and words have fewer cues of cohesion, which indicate how the sentences are related on a conceptual level (McNamara, Louwse and Graesser 2003:3).

For the purposes of the content analysis, cohesion refers to the prevalence of explicit language and text (Graesser et al. 2004:193). Devices which measure cohesion include “explicit features, words, phrases, or sentences that guide the reader in interpreting the substantive ideas in the text, in connecting ideas with other ideas, and in connecting ideas to higher level global units (e.g., topics and themes),” (Graesser et al. 2004:193). These tools of cohesion allow the reader to form their own representation of the text (Graesser et al. 2004:193).

Initially, for this thesis research, a *Flesch-Kincaid* readability calculator was used to test the questions of the 2008-2009 version of the OSSLT. However, the scores achieved for the OSSLT reading passages and multiple choice questions were completely unreliable and inconsistent. The calculator used to calculate the scores was incredibly sensitive, and entering an extra space or letter in the text by mistake would result in a completely different score for both *Ease* and *Grade Level*. Likewise, formatting the paragraphs in the slightest way appeared to produce a similar effect. Because of this and research presented by McNamara, Louwse and Graesser (2003), and Graesser et al. (2004), the thesis needed to find a more effective method of assessing the readability of the OSSLT.

Coh-Metrix

Coh-Metrix is a computational tool that measures the readability of texts in the English language by examining text difficulty and cohesion, and has been suggested as an improved method of analyzing readability for L2 readers (Crossley, Greenfield and McNamara 2008:475). Coh-Metrix goes beyond traditional readability formulas such as the aforementioned *Flesch-*

Kincaid, because it examines language in greater detail and incorporates cohesive features (Crossley, Greenfield and McNamara 2008:480). Cohesive features involve “explicit features, words, phrases, or sentences that guide the reader in interpreting the substantive ideas in the text, in connecting ideas with other ideas, and in connecting ideas to higher level global units (e.g., topics and themes),” (Graesser et al. 2004:193). The program analyzes more than 50 different kinds of cohesion relations, as well as more than 200 measures of readability, text and language (Graesser et al. 2004:194).

With the help of three variables from the Coh-Metrix tool, Crossley, Greenfield and McNamara (2008) found that the variables they had chosen related more closely to the cognitive processes of learners than traditional readability formulas (Crossley, Greenfield and McNamara 2008:487). They found that the result they obtained from using a formula with the three variables was statistically superior to any traditional readability formula, such as *Flesch-Kincaid* (Crossley, Greenfield and McNamara 2008:486-487). The variables they chose examined values for content word overlap, sentence syntax similarity, and word frequency values, all of which go beyond surface-level features of text such as sentence length (Crossley, Greenfield and McNamara 2008:482, 487-488). The three variables used by Crossley, Greenfield and McNamara are just three indices out of many in the Coh-Metrix tool that can measure cohesion (Crossley, Greenfield and McNamara 2008:487). After describing how the Coh-Metrix tool works, I will discuss the variables I have chosen from the Coh-Metrix tool and how readability was measured using said variables.

I was able to access the Coh-Metrix tool by using the website <http://cohmetrix.memphis.edu/cohmetrixpr/index.html>, and clicking on the ‘tool’ button. From there, I entered the login and password information that I retrieved from Memphis State, whose website hosts the Coh-Metrix tool. For passages from the 2009 version of the OSSLT, I entered in the genre which accurately described the passage, and the Latent Semantic Analysis (LSA) space. There are three genre options for the Coh-Metrix tool: science, narrative, and informational (University of Memphis 2006). Narrative refers to texts that describe fictitious or real events, such as a story or newspaper article (Graesser et al. 2004:196). Informational pertains to texts that are factual or provide information, such as a text from an encyclopedia or textbook (Graesser et al. 2004:195-196). LSA space refers to the category of world knowledge that needs to be established before the Coh-Metrix tool forms a statistical representation of the meaning of words and texts (Graesser et al. 2004:196). I found five options to select for LSA space: CollegeLevel, Science, Physics, Narrative347, and Encyclopedia (University of Memphis 2006). I was advised by a Coh-Metrix expert to use CollegeLevel as my LSA space, since it carries data from the Touchstone Applied Science Associates (TASA) corpus, which contains texts intended for students from all grades in the United States (Crossley 2010; Landauer, Foltz and Laham 1998:273). I also tested one reading passage using different genres and LSA spaces, to find out that the only numbers that changed were those which measured LSA. I will describe the concept of LSA in more detail briefly, as it is one of the measures of language from the Coh-Metrix tool that I have chosen to analyze the readability of texts from the OSSLT.

As previously mentioned, the Coh-Metrix tool uses a multitude of variables that measure the readability of a given text. For the analyses of the reading passages that appeared on the 2008

and 2009 versions of the OSSLT, I selected four measures of readability from the Coh-Metrix tool. The measures I selected were LSA, hypernymy, word frequency, and concreteness, because these measures have been used in publications examining the readability of texts used for L2 students, as well as publications examining the differences between L1 and L2 writing and the spoken dialogue of L2 students (Crossley et al. 2007; Crossley et al. 2008; Crossley and McNamara 2009; Crossley, Salsbury and McNamara 2009; Crossley, Boggess and Salsbury 2009).

Latent Semantic Analysis (LSA)

LSA has been employed as a method of predicting how coherent and readable texts are (Crossley et al. 2008:1907). The goal of LSA is to determine similarities in passage meaning, by reducing thousands of relationships between words and dimensions (the amount of times words appear in a text) to hundreds of relationships and dimensions (Crossley et al. 2008:1907). LSA measures semantic similarity, which refers to the amount of similarity that exists between hyponyms, antonyms, synonyms, and other words that are often used in the same context (Foltz, Kintsch and Landauer 1998:286). For further clarification, here as an example of LSA in practice:

“Text 1: The field was full of lush, green grass. The horses grazed peacefully. The young children played with kites. The women occasionally looked up, but only occasionally. A warm summer breeze blew and everyone, for once, was almost happy.

Text 2: The field was full of lush, green grass. An elephant is a large animal. No-one appreciates being lied to. What are we going to have for dinner tonight?

In the example texts printed above, Text 1 records much higher LSA scores than Text 2. The words in Text 1 tend to be thematically related to a pleasant day in an idyllic park scene: *green*,

grass, children, playing, summer, breeze, kites, and happy, In contrast, the sentences in Text 2 tend to be unrelated.” (University of Memphis 2006)

Values of LSA range from 0 to 1, with 0 indicating no semantic similarity, and 1 indicating high semantic similarity (Millis et al. 2001:583)¹. The higher the LSA values, the more likely that the words, sentences and/or paragraphs are closely related to a specific theme (University of Memphis 2006). There are LSA values for words, sentences, and paragraphs in a given text (University of Memphis 2006).

In relation to L2 students, Crossley et al. (2008) looked at improvements in the spoken dialogues of L2 students at an American university who were at the lowest level of English proficiency (Crossley et al. 2008:1908). They found that values for semantic similarity increase as time spent studying English increases (Crossley et al. 2008:1908). This shows that L2 students’ comprehension of semantic similarity starts off as weak, but gradually improves. Crossley and McNamara (2009) also use the findings from this study to note that LSA is used to demonstrate the degree to which lexical networks in L2 students are developed (2009:124). My analyses of the texts on the OSSLT will help determine which passages show greater semantic similarity. LSA will thus be a valuable measure of readability to use for my analysis of text passages from the OSSLT.

¹ There appears to be some debate as to whether LSA values range from 0 to 1, or -1 to 1. When discussing Coh-Metrix, Graesser et al. (2007) describe LSA as ranging from 0 to 1 (2007:202), but in another publication discussing Coh-Metrix, Graesser et al. (2004) describe the values of LSA as ranging from -1 to 1. When conducting the Coh-Metrix operations, I was not able to achieve any LSA value below 0. This leads me to believe that the LSA range for the Coh-Metrix tool might have been changed.

Hypernymy

Coh-Metrix calculates values for hypernymy, which measures the abstraction of a given text (Crossley and McNamara 2009:125). Coh-Metrix measures hypernymy using WordNet, a lexical database that contains over 54,000 “lexical entries” which are organized into 48,000 sets of synonyms (Crossley and McNamara 2009:125; Miller et al. 1990: 236-237).

To illustrate the concept of hypernymy, we can use the words “vehicle” and “car” (Crossley and McNamara 2009:125). “Vehicle” would exhibit a higher hypernym value than “car” (Crossley and McNamara 2009:125), since the word has multiple contexts. While someone can remark that their neighbour’s Porsche is a nice vehicle, someone could also describe a motorcycle, boat, bicycle, or tram as a vehicle. In fact, the Canadian Oxford Dictionary defines a vehicle as “any conveyance for transporting people, goods, etc., esp. on land,” “a medium for thought, feeling, etc.,” “a liquid”, and “a song” (Barber 2004f). Additionally, it is safe to assume that schoolchildren would learn the word “car” long before they would learn the word “vehicle”. When compared with “vehicle”, “car” is monosyllabic, and can almost exclusively be defined as a vehicle with wheels that carries passengers (Barber 2004g). On the contrary, “vehicle” can be construed as a thought, song, liquid, or something that transports people or objects (Barber 2008f).

In addition, words that are more common may increase hypernym values since they are more likely to be used in different contexts and have more meanings than words that are less common, thereby increasing the level of abstraction in a text (Crossley et al. 2007:20).

Relative to L2 students, Crossley and McNamara (2009) found that L1 writers are more likely to use abstract words (2009:126). This suggests that L1 students are more familiar with abstract words that carry multiple meanings than L2 students. Additionally, a study by Crossley, Salsbury and McNamara (2009) traced the vocabulary growth of six adult L2 students over a year (Crossley, Salsbury, and McNamara 2009:307). They found that as L2 students spent more time studying English and developing their vocabulary, their ability to work with words that have high hypernymic values increased (2009:323). Consequently, texts on the OSSLT that have a higher hypernymic value may be more difficult for L2 students to decode than texts that have a lower hypernymic value.

In their study of L2 word production, Crossley, Boggess and Salsbury (2009) looked at words that had hypernymic values ranging from a minimum of 1 to a maximum of 15 (Crossley, Boggess, and Salsbury 2009:225, 228). Words such as “know”, go, and “have” had hypernymic values of 1, whereas words such as “people”, “time”, and “friend” had hypernymic values ranging from 6-10 (Crossley, Boggess, and Salsbury 2009:228). Finally, words such as “father”, “child”, and “man” had hypernymic values ranging from 11-15 (Crossley, Boggess, and Salsbury 2009:228).

Coh-Metrix calculates the average hypernymic value for each reading passage, for both nouns and verbs (University of Memphis 2006). For the purpose of having a comprehensible content analysis, I will define any reading passage with average hypernymy values of 1-5 as exhibiting low hypernymy, whereas reading passages with average hypernymic values ranging

from 6-10 will be said to have shown medium hypernymy, and reading passages with average hypernymy values of 11 or higher will be defined as showing high hypernymy.

Word Frequencies

The Coh-Metrix tool measured the amount of content words in the reading passages by using CELEX, a database containing 17.9 million words (University of Memphis 2006; Crossley and McNamara 2009:124). Content words include verbs, adverbs, nouns, adjectives and other words that have a rich conceptual content (University of Memphis 2006).

Word frequency measures the likelihood that a reader will be familiar with a certain word, based on its frequent appearance in the world and the subsequent probability that the reader will have previously recognized the word (McCarthy et al. 2007:52). For instance, “mother” is more frequent than “cousin” (Crossley and McNamara 2009:124). Texts that have a greater number of high-frequency words are easier for L2 students to process and decode, and fast decoding is strongly associated with an L2 student’s reading ability (Crossley, Greenfield and McNamara 2008:482). L2 students use written words that are more frequent when compared to their L1 counterparts, indicating that L2 students choose words that are simpler to process (Crossley and McNamara 2009:124). Hence an L2 student’s ability to process a text will increase as the frequency score of a given text increases.

In order to come up with an accurate way of measuring word frequency and interpreting the results of reading passages from released versions of the OSSLT, I tested some words using

the Coh-Metrix tool. The sentence “All work and no play makes Jack a dull boy” had a word frequency score of 644, whereas the sentence “Legalese is a term used to describe the complex vocabulary used by lawyers when applying the law,” earned a score of 4062.4. We must be careful when interpreting these scores. It is not so much the emphasis on monosyllabic words that causes a great discrepancy between scores, but the proportion of certain words in the sentences. Words such as “the” and “is” have high frequencies (McNamara et al. 2010:306) and will hence drive up CELEX scores. The first sentence contains virtually no articles or words such as “is”, whereas the second sentence contains several of these word types. For further evidence, consider the following two sentences:

“I am a man who likes green eggs and ham.”

“Welcome to Philadelphia, a metropolis renowned for its historical significance.”

The first sentence has a word frequency score of 6743.167, whereas the second sentence has a score of only 22.6. The words “I”, “and”, “a”, and “am” all appear in the first sentence. When considering the actual words in both of the sentences, which ones would we likely encounter the most frequently in our society? Green, eggs, ham, and man would all be heard more often than significance, metropolis, renowned, and historical.

Another interesting variation of word frequency scores occurred when I entered the first paragraphs of George Orwell’s *Nineteen Eighty-Four* and Harper Lee’s *To Kill a Mockingbird* into the Coh-Metrix tool. Orwell’s book received a raw CELEX score of 1527.194, whereas Lee’s work had a raw CELEX score of 2861.368. Do these results show that the first paragraph of Orwell’s book is more difficult for L2 students to process than the first paragraph of Lee’s

book? In this case, the answer is yes, however it is difficult to determine the extent of the difficulty, and such is my main concern with word frequency scores.

While we cannot say anything definite about the extent to which differing word frequency scores affect the difficulty of a given text for L2 students, we can compare the word frequency scores of the reading passages in order to determine which passages might be more difficult for L2 students to comprehend. We can also compare the word frequency scores with the results of my analyses of LSA, hypernymy, and concreteness in order to gain an overall picture of the relative difficulty of a given text.

Concreteness

Concrete words are those which one can figuratively see, hear, taste, smell, feel, and touch (Crossley, Boggess and Salsbury 2009:227; Crossley and McNamara 2009:125). Often times, concrete words refer to people, objects, or materials (Crossley, Boggess and Salsbury 2009:227). For instance, words such as shrimp and restaurant have high scores on the concreteness scale (Crossley and McNamara 2009:125). When reading the word “shrimp”, one might recall the smell or taste of deep-fried shrimp or remember the texture of a tiger shrimp’s shell. It thus seems perfectly reasonable that a word such as shrimp would rank high on the concreteness scale. Contrary to words with high concreteness scores, words that have a low level of concreteness include words such as admire, dignity, and honesty (Crossley and McNamara 2009:125). Try as one might, it is not possible to touch, taste or smell dignity and honesty.

The concreteness index used in the Coh-Metrix tool is taken from the Medical Research Council (MRC) Psycholinguistic Database, which contains 150,837 words and is based on psychological experiments in which human participants were exposed to a large variety of words (Crossley et al. 2007:21; Crossley and McNamara 2009:125). In their analysis of concrete words, Crossley, Boggess and Salsbury (2009) found that words such as “have” and “know” scored lowest on the concreteness scale, with respective values of 251 and 274 (Crossley, Boggess, and Salsbury 2009:228). On the contrary, “man” and “fire” scored the highest on the concreteness scale, with respective values of 618 and 595 (Crossley, Boggess, and Salsbury 2009:228). When testing the words described as having high concreteness (shrimp, portrait and restaurant), I found that these words had a mean concreteness score of 594, as opposed to the words described as having low concreteness (admire, dignity, honesty), which had a mean concreteness score of 284.667. This shows that a range exists on the concreteness scale.

To further define the range, more of the concreteness scores from the study conducted by Crossley, Boggess, and Salsbury (2009) can be examined. “Think”, “go”, and “year” had concreteness scores ranging from 337-364 (Crossley, Boggess, and Salsbury 2009:228). It is difficult to see “think” in one’s mind, and it would be more than difficult to hear, smell, taste, or feel words such as “go” and “year”, hence it appears that these words have low levels of concreteness. Contrarily, “shoot”, “country”, and “friend” had concreteness values ranging from 445-465 (Crossley, Boggess and Salsbury 2009:228). One might picture a weapon when seeing shoot, or recall the sounds of gunshots and the smell of gun smoke. On the other hand, one might simply picture a hockey player shooting a hockey puck, and not associate the word with any smells or sounds. Likewise, when seeing “friend”, one may recall an image of a close friend they

have, or perhaps the voice of a friend, but may not experience any other senses associated with the word.

L2 students develop their vocabulary skills over time, and this is especially the case with concreteness (Crossley, Boggess and Salsbury 2009:225). Concrete words can be recognized faster and recalled more quickly when read (Crossley, Boggess and Salsbury 2009:227). As L2 students expand on their vocabulary and continue studying English, they develop the ability to add words that are more abstract to their vocabulary (Crossley, Salsbury and McNamara 2009:322). Crossley, Salsbury and McNamara (2009) also believe that as an L2 student's ability to work with abstract words increases, the level of concreteness in their vocabulary will decrease (2009:320). This indicates that as L2 students improve their vocabulary over time, their ability to work with words that are not very concrete increases. It can consequently be argued that passages with high concreteness scores are easier for L2 students to work with than passages with low levels of concreteness.

Based on the information provided in the studies above, reading passages with concreteness scores below 400 will be defined as having low concreteness. Reading passages with concreteness scores between 400-500 will be defined as having moderate concreteness, and reading passages with concreteness scores above 500 will be defined as having high concreteness.

The Coh-Metrix tool will be used in order to measure the LSA, hypernymy, word frequency, and concreteness scores of the 8 reading passages found on the 2008 and 2009

versions of the OSSLT. The four variables selected have been shown to indicate the degree to which L2 students have challenges with certain texts over others, and will thus be useful for comparing reading passages on the OSSLT.

VocabProfile

While the Coh-Metrix tool analyzed the readability of the four reading passages from the OSSLT, the 38 multiple choice questions and 8 short and long answer questions contained on each test still needed to be analyzed. Despite the fact that the Coh-Metrix tool will normalize its findings regardless of text length (Crossley et al.:2), I needed to find another program that was capable of looking at the multiple choice questions and determining which specific words posed problems for L2 students. This would be very time-consuming if not impossible to do with the Coh-Metrix tool, since it provides numeric values indicating text difficulty as opposed to highlighting specific words.

VocabProfile analyzes text by looking at high and low frequency words used by either a native English speaker or an L2 learner in a text (Cobb:nd). Its method of analysis involves taking texts and dividing them into four different categories of words (Cobb:nd). The categories include the 1000 most frequent words in the English language, the second 1000 most frequent words, words from the Academic Word List (AWL), and off-list words (Cobb:nd). The 1000 and 2000 most common words, referred to respectively as K1 and K2 in the VocabProfile program, were taken from the General Service List (GSL) (Sevier 2004), which was created in 1953 and adapted in 1995 by Bauman and Culligan (Bauman 1995).

The AWL contains 570 high-frequency words which appear regularly in academic works, and when mastered, are said to be crucial for success in post-secondary education (Sevier 2004; Morris and Cobb 2004:78). Off-list (OL) words refer to less frequent words that do not appear on any of the aforementioned lists, such as soccer, macho, and proper names (Horst 2005:364; Horst and Collins 2006:85, 87).

Relative to L2 students, Laufer and Nation (1995) conducted a study that analyzed the written compositions of L2 students from New Zealand and Israel (1995:314). They organized the students into three groups, ranging from those with the lowest level of English proficiency to those with the highest (Laufer and Nation 1995:314). Group 1 had the lowest level of proficiency, and was composed of L2 students studying English for Academic Purposes at a university in New Zealand (Laufer and Nation 1995:314). Groups 2 and 3 were Israeli university students who had all completed high school in Israel, where certification of English-language proficiency is required (Laufer and Nation 1995:314). Group 3 had a higher level of proficiency than Group 2, and Group 2 had a higher level of proficiency than Group 1 (Laufer and Nation 1995:314).

The researchers found that the students in Group 1 were the most likely to use K1 words, whereas students in Group 3 used the smallest proportion of K1 words (Laufer and Nation 1995:316). The groups did not significantly differ in terms of their use of K2 words, however the researchers note that less proficient students are more likely to use K2 words (Laufer and Nation 1995:316). When examining the ability of students to use words from the University Word List

(UWL), the predecessor of the AWL (Morris and Cobb 2004:77), the researchers found that students in Group 1 were much less likely to use UWL words than students in the other groups, whereas students in Group 3 used the largest proportion of UWL words (Laufer and Nation 1995:316). Students in Group 1 were also significantly less likely to use OL words, whereas students in Group 3 used the highest proportion of OL words (Laufer and Nation 1995:316). The researchers thus showed the differences L2 students have in their ability to use K1, K2, AWL and OL words based on their proficiency level in English.

The results of the research conducted by Laufer and Nation show some of the benefits of using VocabProfile to analyze the vocabulary used on the OSSLT. While the study by the researchers analyzed written compositions of L2 students and assessed their proficiency accordingly, we must remember that an L2 student's proficiency in writing will be dependent on the reading skills they developed in English, as was highlighted in the background chapter.

Additionally, when compared with their L1 counterparts, L2 writers have a relatively smaller vocabulary (Laufer and Nation 1995:307). As previously noted in the background chapter, vocabulary is one of the main components of the OSSLT, and research has shown that L2 students have the greatest difficulty with the vocabulary portion of the test. Using VocabProfile on short answer and multiple choice questions of the OSSLT will allow us to make assumptions about the difficulty of certain questions relative to others, based on the proportion of K1, K2, AWL or OL words found in the questions. If a particular question contains a high proportion of OL words, then we can assume that the question may be more difficult for L2

students to comprehend. It will also show the variation of language and vocabulary used in the test, and perhaps some of the inconsistencies in vocabulary difficulty per question.

I used the VocabProfile tool on the LexTutor website in order to conduct my analysis of the short answer and multiple choice questions of the OSSLT. The tool was easily accessible by using the following website: <http://www.lextutor.ca/vp/eng/>. I simply copied and pasted the questions from the 2008 and 2009 versions of the OSSLT into the text box provided by the website, hit the 'submit' button, and the program was able to determine whether each word was a K1, K2, AWL or OL word. The highlights of the VocabProfile results are presented in Tables 2.1 and 2.2.

Analyzing the VocabProfile Results

After I had initially completed the methodology chapter and discussed the results of the VocabProfile analysis, it was explained to me that I had in fact used a precise method of investigating the results from the VocabProfile analysis. The goal of the VocabProfile analysis was to look at the multiple choice and short answer questions of both versions of the OSSLT in order to determine the proportions of K1, K2, AWL and OL words that occur in the questions on the test. However, while reviewing the percentages of the different word categories that occur in the questions, I discovered that it is more important to look at where AWL and OL words are placed in the multiple choice and short answer questions, as opposed to simply looking at the percentages and making assumptions about the difficulty of the questions. This is because AWL or OL words that are placed in areas of a question where knowledge of the word is essential to

answering the question may have an impact on an L2 student's comprehension of the question. As such, I used a precise way of identifying AWL and OL words that were placed in areas of the question where knowledge of the AWL or OL word was needed to understand or answer the question.

Each multiple choice and short answer question was placed into the VocabProfile tool, which identified each word in the questions as K1, K2, AWL or OL. In order to identify whether the placement of an AWL or OL word was essential for answering the question, I omitted the word from the question and tried to determine whether the question still made sense. For instance, Section III of the 2009 OSSLT asks students to discuss the importance of learning about other cultures, wherein "cultures" is an AWL word. If I omitted "cultures" from the question, the question would not make any sense. On the other hand, a short answer question from Section IX of the 2009 OSSLT asks students to determine how a person's behaviour reveals information about their character, and to support their answer using specific details in the selection. In this question, "reveal", "specific", and "selection" are AWL words. However, if one looks at the short answer question and omits these words, the question can still be easily understood and answered. This was thus my way of determining whether AWL or OL words placed in the multiple choice and short answer questions were essential for answering the questions.

In sum, the content analysis used two computational tools to analyze the OSSLT with the goal of determining whether there are inconsistencies in the level of difficulty for reading passages, short answer and multiple choice questions. The purpose behind this was to uncover

some of the inconsistencies that may provide L2 students with a heightened level of difficulty on the test.

Interviews

Purpose

The purpose of conducting interviews is to gain information about the impact of the OSSLT on L2 students that could not be explained by the content analysis. Interviews were chosen as a way of answering three of the research questions that motivated the study.

Answering these questions is fundamental to a comprehensive exploratory study on the OSSLT, and speaking with qualified secondary school teachers who work with L2 students everyday is the best way to answer the questions.

Interview Structure and Questions

In total, I completed interviews with four current secondary school teachers in Ontario. All interviews were semi-structured, and interview questions kept very closely to three of the thesis' original research questions. I had a set of three questions which I asked each interview respondent, which can be found in Tables 5, 6 and 7, along with the interview transcripts which are also available in Tables 5, 6, and 7.

Semi-structured interviews were the best way to obtain direct answers to three of the research questions which motivated the study. I did my best to ensure that the questions were worded clearly and were not leading, and found that all four respondents were able to discuss each of the questions at length.

Of the five interviews which took place, only one was tape-recorded and took place over the phone. The remaining three interviews took place in face-to-face meetings and were not tape-recorded, due to the comfort level of the respondents involved. While I took notes during the interviews that were not tape-recorded, I feel that not using a tape-recorder helped foster an environment where casual conversation could easily take place.

Respondents

I sought interviews with Ontario secondary school teachers who were teaching English and ESL. English and ESL teachers encounter L2 students in their classrooms everyday, and in some cases, devote weeks to preparing their learners for the OSSLT. Teachers interviewed all had at least a year of classroom experience with L2 students, and hence were in a position where they were capable of observing patterns and trends in the performance of their students in learning English and succeeding on the OSSLT. They were therefore the most qualified individuals to answer questions about the OSSLT.

All four respondents were teaching at a school in Ontario at the time of the interviews. They differed in terms of teaching experience, gender, and the location in which they taught secondary school.

Respondent 1

The first respondent interviewed was a male English teacher at a secondary school in Toronto, Ontario, who had been teaching for at least 15 years. He had thus been at the school since the inception of the OSSLT. Since the respondent lived in a locale different from my own, the interview took place over the phone and was tape-recorded.

The respondent estimated that approximately 20% of the school's students were L2 students. The respondent stated that the population included not only ESL and ELD students, but a number of students who were enrolled in the *Literacy Enrichment Academic Program (LEAP)*, which provides English language and literacy skills, as well as mathematics to L2 students who were unable to consistently attend school in their home country (TDSB:nd). The population of L2 students at the school was described as diverse, with most coming from areas such as South America, Eastern Europe, the Caribbean, and East Asia.

We asked the respondent the three key questions discussed above, as well as some demographic information about their school.

Respondent 2

The second respondent was a female ESL teacher at a secondary school in Ottawa, Ontario, who had been teaching for more than 15 years.

I first came into contact with the respondent at an ESL conference, where the respondent graciously offered me the opportunity to interview her and other teachers on the subject of the OSSLT. The interview with the second respondent was conducted in person, and the respondent requested that I did not tape-record their responses. I thus transcribed all my notes onto pen and paper, and then typed the notes on a computer. I asked the respondent the same set of questions that I asked the first respondent.

The respondent stated that none of the L2 students who attended the school were born in Canada. The respondent's classroom was composed of ESL students with advanced English skills (relative to other ESL students), who were required to write the OSSLT. The respondent estimated that only a couple of the students were prepared to write the test, in a classroom with 15-20 students. The majority of students were from South and Southeast Asia (Sri Lanka, Vietnam, and Indonesia). Five of the classroom's students were from China, and the remaining students were from Eastern Europe and Mexico, with one student from the middle-East.

Respondent 3

The third respondent interviewed was also a current female secondary school ESL teacher in Ontario. The respondent had been teaching for less than 5 years and teaches in Ottawa, Ontario. The second respondent put me into contact with the third respondent.

The respondent had a large class of roughly 30 students. The majority of the students were from China and Korea, with a minority of students coming from Vietnam, Italy, Mexico,

Germany, Thailand and the Philippines. The respondent was teaching a group of ESL students with an advanced level of skills relative to other ESL students, who were required to write the OSSLT.

Respondent 4

The final respondent interviewed was a current female secondary school ESL teacher in Ontario. The respondent has been teaching for over 15 years and teaches in Ottawa, Ontario.

The respondent was teaching roughly 10 ESL students who had a mid-range level of English skills relative to other ESL students. The respondent's ESL students were not required to write the OSSLT and were automatically deferred. At least half of the students in the respondent's class were Asian, with the remaining students coming from a multitude of linguistic backgrounds. The respondent also commented that few, if any of her school's ESL students were born in Canada.

Ethics

This project received clearance from the Carleton University ethics committee until May 31, 2010. All necessary interviews were completed before May 31, 2010.

Analyzing the Interview Data

Data from my interviews was used as a resource, meaning that the interview data was treated as a source of information about behaviour outside the interview setting (Rapley 2001:304). For instance, when I interviewed teachers I treated their comments as information about the impact of the OSSLT and OSSLC on L2 students. However, one of the issues raised with this approach by constructionists is the notion that interview data cannot represent a reality outside the interview, rather the interview itself is the main topic of analysis (Rapley 2001:307). I disagree with the constructionist critique. Granted, it is valid in some cases, such as interviews where spousal abusers jostled with the interviewer over whose definition of the couple's reality prevailed (Enosh and Buchbinder 2005:592). At the same time, Enosh and Buchbinder found that there was a minimal level of conflict when the goals of the interviewer and respondent were compatible (Enosh and Buchbinder 2005:610). My goals were clear to respondents. I wanted to explore the impact of the OSSLT and OSSLC on L2 students. I ensured that questions I posed were neutral, in that it did not appear that I was either for or against the OSSLT or OSSLC. I strongly believe that all parties wanted a better understanding of how the OSSLT and OSSLC affect L2 students.

Additionally, Enosh and Buchbinder (2005) highlight the fact that an intrinsic conflict will exist between the interviewer and respondent whenever the content of the interview poses some sort of threat to the respondent, and in such cases interviewers are constrained by their preconceived notions of reality (Enosh and Buchbinder 2005:613). I am confident that the

content of my interviews did not threaten any of the respondents given the aforementioned purpose of the interviews.

Coding

Coding is a way of analyzing interview data that involves categorizing and summarizing pieces of data obtained from the interview (Charmaz 2006:43). There are many different forms of coding, and the thesis' interview data was coded using an open coding method. Open coding refers to separating data into distinct parts, which are later put back into place (Dey 1999:259). The researcher needs to identify the parts and combine them, in order to understand the parts and their connection (Dey 1999:259-260).

For instance, Cajdric-Vrhovac and Weaver (2009) used open coding to look for themes in the data they obtained from 15 respondents who were asked several questions pertaining to smoking habits in Bosnian culture (2009:1, 4-5). The researchers presented some of the themes that emerged from their discussions, noting the proportion of respondents who reported having similar experiences or beliefs (Cajdric-Vrhovac and Weaver 2009:5-10). Additionally, Quinn-Beers (2009) used open coding as a way of finding variables that described the experiences of 19 mothers who adopted children (2009:ii). The researcher combined variables to form general concepts, and then created 22 broad themes from the concepts (Quinn-Beers 2009:ii).

My interview data is somewhat smaller in scope. I have four respondents, each of whom were asked three uniform questions. Nevertheless, I will still be able to look for themes, patterns

and contrasting ideas in the data I have obtained. The difference between my data analysis and that of the aforementioned studies is that I will have considerably fewer themes, since my study does not rely solely on interview data. Nevertheless, coding provides a level of analysis that is somewhat deeper than simply discussing the highlights of the interview data.

Limitations to Interview Research

Throughout the process of completing this thesis, there were certain obstacles that I encountered as a result of using interviews to investigate three of my research questions. While secondary school teachers are excellent candidates to interview, it would have been very valuable to have interviewed L2 secondary school students in order to determine their own perceptions as to how deferrals affected their progress through secondary school, or whether they felt that the OSSLC was a practical alternative. Although I was able to talk to some secondary school students throughout the research process, I was not able to include data from my conversations because some of the students were under 16 years of age, and would have needed parental consent (Carleton University 2008). Consequently, obtaining permission to include their comments would have been extremely time-consuming.

Additionally, it is somewhat difficult to achieve contact with secondary school teachers of L2 students. This is understandable, as some schools have very few ESL or ELD teachers, and they might have feared being easily identified in spite of having their personal information protected.

It is also important to note that the data obtained is based on the perceptions of the teachers interviewed. This is somewhat limiting in that we do not have any way of determining the absolute accuracy of the comments. For instance, I would have been easily able to answer the research question which asked whether linguistic background plays a role in a student's success on the test if such statistics were published, however it appears that no such information is available from the results of the student questionnaire (EQAO 2009a:8-9). In spite of this, the teachers I interviewed regularly saw demographic shifts in their classrooms, and were able to note the differences in the success rates of some L2 students over others. Teachers interact with their students on a daily basis, in some cases making notes on patterns they observe. They also communicate regularly with other teachers and school administrators, which may strengthen or challenge their own perceptions of trends they observe in the classroom.

In spite of the above limitations, the interviews serve the purpose of answering the thesis' research questions that cannot be explained by the content analysis. Obtaining the opinions of teachers who work with ESL students everyday provides valuable insight into the ways in which the OSSLT and OSSLC affect L2 students. Lastly, open coding is a simple and effective way to deepen the analysis of the interview data, and goes beyond a simple discussion of the findings.

CHAPTER 3:

FINDINGS

This chapter will begin with a presentation of the results of the content analysis for both versions of the OSSLT, starting with the Coh-Metrix results and following with the findings from the VocabProfile analysis. Next, the chapter will discuss the responses to each of the three interview questions asked to four secondary school teachers in Ontario. Finally, the chapter will discuss the four themes which emerged from the interview data as a result of the open coding analysis.

Content Analysis

Coh-Metrix Results

Overall Patterns

The two central patterns uncovered from the Coh-Metrix results include the overall consistency of the OSSLT in terms of its difficulty level for L2 students, and the difficulty of using the Coh-Metrix results to determine which reading passages are the most challenging for L2 students. First, the results indicate that the reading passages for both versions of the OSSLT are fairly consistent in their Latent Semantic Analysis (LSA) scores, use of hypernymic words, and concreteness scores. The only substantial variation that appeared was in the word frequency scores, and due to the lack of information about word frequencies we have no way of

determining the extent to which the variation would have an impact on L2 students. Of particular benefit to L2 students who have difficulties with abstract words is the consistency of hypernymic words used in the reading passages of both versions of the test, since every reading passage appears to have a low hypernymy score. A detailed explanation of the results and their relevance for L2 students follows the subsequent paragraph.

The second central pattern which emerged from the Coh-Metrix results was the difficulty to definitively pinpoint reading passages that would be the most difficult for L2 students to comprehend. This was due to both the levels of consistency in the reading passages across the four measures of readability, as well as the fact that some reading passages appear to be easier than others according to one measure of readability, and yet more difficult than others according to another measure of readability. For instance, as is shown in Tables 1.1-1.5, the sections of each version of the OSSLT that have the highest LSA values also have the highest concreteness scores. This means that while L2 students would see more words that are easy to recall in these sections, the high LSA values in the passages may have an impact on their overall comprehension of the texts. Since we cannot prioritize one measure of readability over another, this puts us in a difficult situation when trying to determine the most challenging passages. At the same time, common sense tells us that certain passages would be difficult for L2 students based on some of the words used in the passages. For example, Section I of the 2008 OSSLT includes words such as skeleton, lushly, lowlands, vegetated, dinosaur, hadrosaur, duck-billed, inland, erosion, abundant, fossilized, and tyrannosaur. Ultimately, the results from the Coh-Metrix analysis allow us to compare reading passages of the OSSLT in order to check for

consistency, and it appears that based on the readability measures chosen, the reading passages are fairly consistent in their difficulty level for L2 students.

Latent Semantic Analysis (LSA)

All four reading passages of the 2009 version of the OSSLT exhibited some semantic similarity, which is measured by LSA and refers to the amount of similarity that exists between hyponyms, antonyms, synonyms, and other words that are often used in the same context (Foltz, Kintsch and Landauer 1998:286). Texts that are related to a theme exhibit significantly higher LSA scores than a text that is not related to any specific theme (University of Memphis 2006). For the 2009 OSSLT, the largest differences amongst LSA values existed between the reading passages for sections I and XI, where there were large differences in word, sentence, and paragraph-level LSA values. As previously discussed in the methodology chapter, L2 students start off with weak levels of semantic similarity, and develop their ability to use semantic similarity over time. This means that reading passages with higher levels of semantic similarity, such as the reading passage for Section I, would be relatively harder for some L2 students than reading passages exhibiting lower levels of semantic similarity, such as Section XI. Table 1.1 shows the LSA scores for all four reading passages from the 2009 OSSLT. The reading passage for Section I exhibited the most semantic similarity at all three levels than any other reading passage for the 2009 OSSLT, with respective word, sentence and paragraph LSA values of 0.29, 0.252, and 0.52. These scores were much higher than the reading passages for Sections VIII and IX, which had respective word, sentence and paragraph LSA values ranging from 0.102-0.218, 0.099-0.175, and 0.276-0.339.

The 2008 version of the OSSLT had reading passages which exhibited much lower levels of semantic similarity than that of the 2009 OSSLT. The respective word, sentence and paragraph LSA values for Sections V, VIII and IX of the 2008 OSSLT ranged from 0.067-0.097, 0.042-0.113, and 0.219-0.286. The reading passage for Section I of the 2008 OSSLT had high levels of semantic similarity, with respective word, sentence and paragraph LSA values of 0.32, 0.337, and 0.503.

The LSA results tell us that the 2008 OSSLT had more reading passages that exhibited low levels of semantic similarity than the 2009 OSSLT. Additionally, the first sections of both tests had much higher levels of semantic similarity than all the other test sections. This shows us that there were a couple of inconsistencies in the difficulty of the reading passages on the OSSLT in terms of LSA values.

How would these discrepancies translate into problems for L2 students? Depending on their level of proficiency in English, L2 students would have likely struggled more with the first sections of both versions of the OSSLT than any other section, since the first sections exhibited the highest levels of semantic similarity as shown in Tables 1.1 and 1.2. Since L2 students increase their ability to use semantic similarity as they improve their proficiency in English, passages with higher levels of semantic similarity would be more difficult for them to comprehend.

Table 1.1: Latent Semantic Analysis for 2008-2009 OSSLT

Reading Passage:	Word-Level LSA	Sentence-Level LSA	Paragraph-Level LSA
Section I	0.29	0.252	0.52
Section V	0.229	0.219	n/a ²
Section VIII	0.218	0.175	0.339
Section IX	0.102	0.099	0.276

Table 1.2: Latent Semantic Analysis for 2007-2008 OSSLT

Reading Passage:	Word-Level LSA	Sentence-Level LSA	Paragraph-Level LSA
Section I	0.32	0.337	0.503
Section V	0.092	0.096	n/a ³
Section VIII	0.097	0.113	0.219
Section IX	0.067	0.042	0.286

Hypernymy

As discussed in the methodology chapter, hypernymy examines the abstraction of a given text (Crossley and McNamara 2009:125). As shown in Table 1.3 below, all reading passages on the 2008 and 2009 tests had average hypernymy scores ranging from 1-5 and could hence be said to have exhibited low levels of hypernymy, as defined in the methodology chapter. This means that the average words found in all of the OSSLT reading passages were not very abstract. The average hypernymy score for nouns on the 2008 and 2009 reading passages ranged from 4.739-

² The reading passage for Section I was only one paragraph, hence it would be impossible to perform a Latent Semantic Analysis at the paragraph-level for this section.

³ The reading passage for Section I was only one paragraph, hence it would be impossible to perform a Latent Semantic Analysis at the paragraph-level for this section.

5.96, whereas the average hypernymy score for verbs ranged from 1.285-1.569. Hypernymy scores can range as high as 15, and go as low as 1 according to the study by Crossley, Boggess and Salsbury (2009) discussed in the methodology chapter. The results for hypernymy indicate that the reading passages for the 2008 and 2009 tests were fairly consistent in their use of abstract words.

L2 students struggle with words that have high hypernymic values, and all of the reading passages had relatively low hypernymy scores. While there may have been some words in the reading passages that had high hypernymy values and confused L2 students, the reading passages mostly contained nouns and verbs that had a minimal level of abstractedness. The hypernymy results tell us that L2 students may have had few problems understanding the majority of the words in the reading passages, and that they likely would not have difficulty with one particular text on the OSSLT based on its use of abstract words.

Table 1.3: Hypernymy

2008-2009 OSSLT			2007-2008 OSSLT		
Reading Passage	Average Hypernymy for Nouns	Average Hypernymy for Verbs	Reading Passage	Average Hypernymy for Nouns	Average Hypernymy for Verbs
Section I	5.517	1.445	Section I	5.949	1.569
Section V	4.843	1.461	Section V	4.916	1.555
Section VIII	5.196	1.285	Section VIII	4.739	1.349
Section IX	5.235	1.439	Section IX	5.96	1.309

Word Frequencies

As discussed in the methodology chapter, word frequency measures the likelihood that a reader will be familiar with a certain word, based on its frequent appearance in the world and the subsequent probability that the reader will have previously recognized the word (McCarthy et al. 2007:52). Texts that have a greater number of high-frequency words are easier for L2 students to process and decode, and fast decoding is strongly associated with an L2 student's reading ability (Crossley, Greenfield and McNamara 2008:482). Word frequency scores for the reading passages on the 2009 OSSLT were relatively inconsistent, however two patterns emerged. As shown in Table 1.4 below, Sections V and IX had respective word frequency scores of 1363.514 and 1347.744, and Sections I and VIII had respective word frequency scores of 1962.455 and 2303.894. This tells us that Sections I and VIII would have been relatively quicker for L2 students to process and decode than Sections V and IX, since Sections I and VIII contain words that are more frequent.

In comparison with the 2009 OSSLT, the reading passages on the 2008 OSSLT were more inconsistent in terms of word frequency scores. Sections I, V, VIII and IX had respective word frequency scores of 262.693, 2713.293, 1941.542, and 2038.947. The finding for Section I is particularly surprising, in that its word frequency score differs substantially from all of the other word frequency scores. By far, this section would have been the hardest for L2 students to decode since it contains the lowest average of frequent words.

What words in Section I make it so hard to decode? The reading passage for this section contained a short story about the recovery of a dinosaur skeleton in Alberta. The passage contains words such as skeleton, lushly, lowlands, vegetated, dinosaur, hadrosaur, duck-billed, inland, erosion, abundant, fossilized, tyrannosaur, and other challenging words. When entered into the Coh-Metrix tool, the twelve words listed in the previous sentence had a word frequency score that was in the single digits. These sorts of words would thus be very difficult for an L2 student to process and decode quickly, due to their infrequent use in society.

The reading passages for both versions of the OSSLT are thus fairly inconsistent in terms of word frequency scores. This tells us that L2 students would have an easier time processing and decoding some reading passages over others.

Table 1.4 Word Frequencies

2008-2009 OSSLT		2007-2008 OSSLT	
Reading Passage	Word Frequency	Reading Passage	Word Frequency
Section I	1962.455	Section I	262.693
Section V	1363.514	Section V	2713.293
Section VIII	2303.894	Section VIII	1941.542
Section IX	1347.744	Section IX	2038.947

Concreteness

The last measure of readability used with the Coh-Metrix tool was concreteness, which looks at words which one can figuratively see, hear, taste, smell, feel, and touch (Crossley,

Bogges and Salsbury 2009:227; Crossley and McNamara 2009:125). As discussed in the methodology chapter, an L2 student's ability to work with abstract words increases, the level of concreteness in their vocabulary will decrease (Crossley, Salsbury and McNamara 2009:320), which indicates that as L2 students improve their vocabulary over time, their ability to work with words that are not very concrete increases. Consequently, it can be argued that reading passages with high concreteness scores are easier for L2 students to work with than passages with low levels of concreteness. There were few discrepancies in concreteness scores for both versions of the OSSLT, as shown in Table 1.5 below. The concreteness scores for both versions of the OSSLT ranged from 388.725 to 450.82, which respectively fell into the 'low concreteness' and 'medium concreteness' categories established in the methodology chapter. At the same time, a few patterns in the concreteness scores from the 2008 and 2009 tests emerged.

Sections I and V of the 2009 OSSLT and Section V of the 2008 OSSLT all had concreteness scores ranging from 431.024-432.037. Section VIII of the 2009 OSSLT and Section IX of the 2008 OSSLT had respective concreteness scores of 389.544 and 388.725, whereas Section IX of the 2009 OSSLT and Section VIII of the 2008 OSSLT had respective concreteness scores of 397.385 and 400.177.

Since words that are concrete are easier to recall (Crossley, Bogges and Salsbury 2009:227), reading passages with higher levels of concreteness would contain a larger number of words that L2 students could recall and read quickly. The concreteness results tell us that the majority of reading passages on both versions of the OSSLT have moderate or slightly low levels

of concreteness. This means that many of the reading passages on both versions of the test contain words that are not concrete and may therefore reduce an L2 student's reading speed.

Table 1.5: Concreteness

2008-2009 OSSLT		2007-2008 OSSLT	
Reading Passage	Mean Concreteness for Content Words	Reading Passage	Mean Concreteness for Content Words
Section I	431.103	Section I	450.82
Section V	431.024	Section V	432.037
Section VIII	389.544	Section VIII	400.177
Section IX	397.385	Section IX	388.725

VocabProfile Results

Multiple Choice Sections

Unlike the Coh-Metrix findings for the reading passages, the VocabProfile findings indicated that the multiple choice sections for both versions of the OSSLT had a large amount of variation in their use of K1, K2, Academic Word List (AWL) and off-list (OL) words. As discussed in the methodology chapter, K1 words refer to the 1000 most frequent words in the English language and K2 words are the second 1000 most frequent words (Cobb:nd; Sevier 2004). AWL words are taken from a list which contains 570 high-frequency words that appear regularly in academic works, and when mastered, are said to be crucial for success in post-secondary education (Sevier 2004; Morris and Cobb 2004:78). OL words refer to less frequent words that do not appear on any of the aforementioned lists, such as soccer, macho, and proper names (Horst 2005:364; Horst and Collins 2006:85, 87). Research conducted by Laufer and Nation (1995) discussed in the background chapter shows that L2 students with a limited amount of proficiency in English are more familiar with K1 and K2 words as opposed to AWL and OL words. This is why it was important to look at the multiple choice sections and short answer questions of the OSSLT, in order to examine some of the questions which may hinder the performance of L2 students.

The results from the VocabProfile analysis showed that certain multiple choice sections from both versions of the test stood out as being the most difficult for L2 students, based on both the number of K1, AWL and OL words used in the questions, as well as the placement of such

words in the questions themselves. For instance, Section V of the 2009 OSSLT had the lowest proportion of K1 words (66.46%), and the third-highest proportion of OL words (14.29%). Likewise, Section I of the 2008 OSSLT had a relatively low proportion of K1 words (69.62%), with the second-highest proportion of OL words (15.19%). The combination of a low proportion of K1 words with a large number of OL words means that L2 students would be faced with a large number of words they might be unfamiliar with when attempting to answer the multiple choice questions, which would negatively affect their performance on the test.

Designers of the test need to be very careful when creating questions that appeared in the aforementioned sections. For instance, the second question in Section V of the 2009 OSSLT asked students to find the best synonym for “emulate”, an off-list word. The four possible answers to this question contained two K2 words and two OL words, which increases the difficulty of the question enormously for L2 students. Questions in Section I of the 2008 OSSLT also contained a large number of words that were noted as having very low word frequency scores in the Coh-Metrix portion of the analysis, such as duck-billed, dinosaur, hadrosaur, and badlands. Both of these sections are scattered with OL words, which L2 students may not be familiar with depending on their level of proficiency in English.

Another section that appeared difficult based on the VocabProfile analysis was Section IX of the 2009 OSSLT, which had the second-lowest proportion of K1 words (66.67%), the fifth-highest proportion of OL words (13.19%), and the third-highest proportion of AWL words (10.42%). The low number of K1 words when coupled with a high proportion of AWL and OL words challenges the ability of L2 students to answer the questions in the section. The first

multiple choice question in section IX asks why a character in the passage yelled “ouch”, an OL word. The second question asks students to identify the purpose of using a dash in a certain paragraph, and dash is another OL word. The third question asks students to determine why a character refers to himself as a hotshot designer. “Hotshot” is an OL word, and “designer” is an AWL word. The fourth question asks students to interpret the meaning of two AWL words strung together (“innovative designer”), and provides four possible answers. One of the possible answers is an AWL word, and two of the possible answers are OL words. Thus four out of the five questions contained in Section IX of the 2009 OSSLT would be very difficult for L2 students to comprehend based on their use of AWL and OL words, which L2 students might not be familiar with based on their level of English proficiency.

Contrary to the aforementioned multiple choice sections discussed above, one multiple choice section appeared much easier for L2 students to comprehend. Section II of the 2009 OSSLT had the highest proportion of K1 words (80.63%), and the lowest proportion of OL words (2.77%). Only one of the possible answers to all of the questions in Section II contains OL words, wherein one of the OL words is merely “Ontario”.

The table subsequent to this paragraph shows the percentages of K1, K2, AWL and OL words that appeared in each multiple choice section for both versions of the OSSLT. When interpreting the results of the VocabProfile analysis, we must not simply look at the raw percentages of K1, K2, AWL and OL words when assessing the difficulty of test questions for L2 students. Rather, we need to look at the questions themselves in order to see where OL and AWL words are placed, and determine the subsequent difficulty of the question. For instance,

Section XI of the 2008 OSSLT contains a relatively low proportion of K1 words (68.89%), low proportions of AWL words (5.78%) and OL words (5.33%). Additionally, 20% of the words in this section are K2 words, which are favoured by L2 students with limited proficiency levels in English. When looking at the percentages, this section seems much easier than others for L2 students to answer. However, the placement of AWL and OL words in the questions of this section makes the section a little more challenging for L2 students. For instance, one question asks students why “text boxes” are used. “Text” is an AWL word, and not all students might be familiar with the idea of text being presented in “boxes”. Another question asks students to determine why “the thermometer shows both Celsius and Fahrenheit centigrade”.

“Thermometer”, “Celsius” and “Fahrenheit” are all OL words, which might be difficult for L2 students to digest if they come from backgrounds where this type of information is not presented to them regularly. Yet another question asks students to figure out why some information is written in “italics”, an OL word that may be unfamiliar to L2 students. In spite of having low proportions of AWL and OL words, three of the six multiple choice questions in Section XI of the 2008 OSSLT have AWL or OL words that are placed in areas of the question that could cause confusion or difficulty for L2 students. We thus need to look at the placement of such words in each question in order to determine the difficulty of the multiple choice sections, instead of simply comparing the percentages of K1, K2, AWL and OL words.

Table 2.1: VocabProfile Results: Multiple Choice Sections

2008-2009 OSSLT				
<u>Section</u>	<u>K1 Words (%)</u>	<u>K2 Words (%)</u>	<u>AWL Words (%)</u>	<u>OL Words (%)</u>
Section I Multiple Choice Questions	69.85	8.09	9.56	12.50
Section II Multiple Choice Questions	80.63	11.46	5.14	2.77
Section V Multiple Choice Questions	66.46	11.18	8.07	14.29
Section VII Multiple Choice Questions	76.89	8.71	4.17	10.23
Section VIII Multiple Choice Questions	76.70	4.42	7.37	11.50
Section IX Multiple Choice Questions	66.67	9.72	10.42	13.19
2007-2008 OSSLT				
Section I Multiple Choice Questions	69.62	4.43	10.76	15.19
Section II Multiple Choice Questions	67.71	9.40	6.58	16.30
Section V Multiple Choice Questions	73.80	10.92	6.11	9.17
Section VII Multiple Choice Questions	76.65	11.67	2.72	8.95
Section VIII Multiple Choice Questions	68.50	7.23	13.01	11.27
Section IX Multiple Choice Questions	76.64	8.76	6.57	8.03
Section XI Multiple choice Questions	68.89	20.00	5.78	5.33

Short and Long Answer Questions

Immediately, the first positive aspect I noticed about the short and long answer questions on both versions of the OSSLT was that 9 out of 16 questions contained zero OL words. Hence both versions of the OSSLT had no OL words in at least half of their short and long answer questions. Questions without OL words pose less of a problem for L2 students than questions with many OL words.

However, many of the questions contained AWL words, and the placement of these words in the questions may present L2 students with an increased level of difficulty. This was particularly problematic with the 2009 version of the OSSLT. In Section III of the 2009 OSSLT, students are asked to discuss the importance of learning about other cultures, “cultures” being an AWL word. This is noteworthy, as L2 students are less likely to be familiar with AWL words depending on their proficiency level in English. Additionally, Section IV required students to write an essay based on a newspaper headline which read “Student volunteers improve school grounds”. “Volunteers” is an AWL word, which might be problematic given that volunteering is not a universal norm. For instance, volunteering has been described as “rare” in the former Soviet Union (Aksartova 2006:19). Additionally, Hodgkinson (2003) found that rates of volunteering were significantly higher in Sweden, Slovakia, Great Britain, the Central African Republic, South Africa and Chile as opposed to Russia, Portugal, Serbia and Japan (Hodgkinson 2003:37, 39). Some L2 students could thus be unfamiliar with the concept of volunteers helping out at school, depending on their cultural background. Consequently, the question from Section IV of the 2009 OSSLT shows how the placement of AWL words in test questions can have a

potentially negative impact on the test performance of L2 students, since they have more difficulty with AWL and OL words as opposed to K1 and K2 words.

For further evidence that test designers need to be conscious of where they place specific words, consider one of the short answer questions for Section IX. Part of the question reads “What do Pamela’s words and actions reveal about her character”, with “reveal” appearing as the lone AWL word. The test designers could have simply used “show”, a K1 word, to eliminate the AWL word. Similarly, part of the short answer question for Section X reads “explain why this method is effective”, wherein “method” is the only AWL word. Why not use “way”, a K1 word, in place of “method”? Changing specific AWL words to K1 words would not make the test questions any easier, since students would still be expected to provide a clear, thoughtful and coherent answer. Rather, changing AWL words to K1 words would make the questions clearer and would increase the opportunity for L2 students to succeed.

For the most part, the 2008 version of the OSSLT was clearer than the 2009 OSSLT with regards to its placement of AWL words in short and long answer questions. AWL words were often placed in areas of the questions that would not likely distract or confuse the reader. For instance, part of the short answer question for section I asks students to “use specific details and examples from the selection to support your answer”, wherein “specific” and “selection” are the AWL words. Even if one had no idea what the words “specific” and “selection” meant, it would still be possible to interpret the question’s demands. The reader could eliminate the AWL words in their mind and view the question as “use details and examples to support your answer”. This again shows the importance of placing AWL words carefully when designing test questions.

Nevertheless, there were a couple of questions in the 2008 version of the OSSLT which could have been easily arranged to eliminate the AWL words and provide further clarity to L2 students. A portion of one of the short answer questions for Section IX reads “explain why the final sentence”, where “final” is the AWL word. Part of the short answer question for Section X reads “describe two positive features of living in Canada”, in which “positive” and “features” are the AWL words. Again, I must wonder why “final”, “positive”, and “features”, cannot all be changed to K1 words such as “last”, “good”, and “things”. Would “describe two good things about living in Canada” sound too inelegant? Perhaps, but the question would be a lot clearer for L2 students without the use of AWL words. The table below shows the percentages of K1, K2, AWL and OL words that appeared in each short and long answer question for both versions of the OSSLT, however we must remember that the most important thing to examine when determining whether or not a question will cause difficulty for L2 students is the placement of AWL or OL words in areas that would hinder the test performance of L2 students.

Table 2.2: VocabProfile Results: Short and Long Answer Questions

2008-2009 OSSLT				
<u>Section</u>	<u>K1 Words (%)</u>	<u>K2 Words (%)</u>	<u>AWL Words (%)</u>	<u>OL Words (%)</u>
Section I Short Answer Question	81.48	3.70	7.41	7.41
Section III Short Answer Question	88.24	0.00	11.76	0.00
Section IV News Report Headline	60.00	20.00	20.00	0.00
Section V Short Answer Question	84.62	0.00	15.38	0.00
Section VI Long Answer Question	93.33	0.00	6.67	0.00
Section IX Short Answer Question	80.00	0.00	15.00	5.00
Section IX Short Answer Question	77.78	7.41	14.81	0.00
Section X Short Answer Question	77.78	5.56	5.56	11.11
2007-2008 OSSLT				
Section I Short Answer Question	80.00	8.00	8.00	4.00
Section III Short Answer Question	100.00	0.00	0.00	0.00
Section IV News Report Headline	40.00	40.00	0.00	20.00
Section V Short Answer Question	78.57	0.00	21.43	0.00
Section VI Long Answer Question	80.00	10.00	10.00	0.00
Section IX Short Answer Question	66.67	8.33	25.00	0.00
Section IX Short Answer Question	85.71	0.00	9.52	4.76
Section X Short Answer Question	78.57	0.00	14.29	7.14

Overall Interpretation of VocabProfile Results

Overall, the most important finding from the VocabProfile results is that the tables showing the percentages of AWL and OL words for the multiple choice questions and short and long answer questions are not the most necessary tool to use when predicting the success of L2 students on the OSSLT. While they are useful in presenting an overall picture of how different multiple choice sections and test questions are written, we cannot necessarily make any assumptions about the difficulty of one section or question based on the fact that the particular section or question has a high percentage of AWL or OL words. Rather, we must look at where AWL and OL words are placed in the questions of both versions of the OSSLT, as this will have a large impact on the success rates of L2 students. What I have found from conducting the VocabProfile operations is that the 2009 version of the OSSLT appears to have slightly more multiple choice questions and short answer questions that have AWL or OL words placed in areas of the questions where knowledge of the AWL or OL word is essential for answering the question. Consequently, we could assume that the multiple choice and short answer questions in the 2009 OSSLT are slightly more difficult for L2 students to answer than the questions in the 2008 OSSLT, however the placement of AWL and OL words was an issue for both tests. Regardless of which version of the OSSLT appears to have more challenging questions for L2 students to answer, the VocabProfile results showed that test designers need to consider how the placement of AWL and OL words could have an impact on an L2 student's ability to process a question clearly, especially when it would be just as easy to provide K1 words in the question.

Interviews

The content analysis sought to answer one of the thesis' main research questions, which pertained to the language used in the test and whether or not it had a negative impact on L2 students. Contrarily, the interviews sought to answer the thesis' research questions that could not be answered by the content analysis, such as the impact of test deferrals on an L2 student's progress in secondary school, the possibility of certain linguistic groups outperforming others on the test, and the quality of the OSSLC as an alternative to the OSSLT.

Answers to the Three Interview Questions

Question 1: How do deferrals affect an L2 student's progression in secondary school?

The first question is based on one of the thesis' original research questions, pertaining to the issue of deferrals and whether or not they have an impact on the progression of L2 students in secondary school. I wanted to ask this question due to the large differences in deferral rates I found between L1 and L2 students, as 4% of all students in Ontario were deferred from the test in 2008-2009, compared to 32% of L2 students (EQAQ 2009a:3, 14). I found this fascinating, and thought that if L2 students were continually deferred from taking the test, then they may have to enroll in secondary school for an additional number of years until they graduate. Worse, I thought that they may simply leave secondary school as a result of not being able to take the OSSLT.

Table 3.1 shows the respondents' answers to this question. One important thing to note from the interview comments is that individual schools seem to decide whether L2 students at certain proficiency levels have to write the OSSLT. The students in the first respondent's school had to write the test irrespective of their proficiency level, whereas the students in the fourth respondent's class were not required to write the OSSLT. Both of these teachers did not see any issue with deferrals, however, as shown by their comments in Table 3.1. Contrary to respondents 1 and 4, respondents 2 and 3 were both teaching classes where L2 students were required to write the OSSLT. Whereas respondent 2 argued that deferrals were not very consequential to an L2 student's success in secondary school, respondent 3 said that students benefit from seeing what's on the test. In spite of this, respondent 2 stated that performing poorly on the test affects the confidence levels of L2 students. While there is some debate amongst the respondents as to the impact of deferrals, it seems from the interviews that the majority of the respondents do not see any issue with deferrals, arguing that they have a minimal impact on students. This was one of the main themes which emerged from the analysis, and is discussed in more detail in the 'Themes from Open Coding' section, which starts on page 92.

Table 3.1: Responses to Question 1

Respondent 1 Male English Teacher Secondary School Toronto	Respondent 2 Female ESL Teacher Secondary School Ottawa	Respondent 3 Female ESL Teacher Secondary School Ottawa	Respondent 4 Female ESL Teacher Secondary School Ottawa
At our school, there was a time when many of the ESL students were deferred and then it was sort of the fashion that they all	Minimal – we don't make a big deal out of it here. If they	Deferrals are not a good thing, because students deferred miss the opportunity	Deferrals don't affect their progress. Students [in

<p>had to write regardless of where they were in ESL. I think at this point now that's pretty well the situation.</p> <p>They're probably only deferred for one year, some are perhaps deferred a second year if they're really not making progress in English and there's no indication that they'll pass. I think at that point. You're looking at kids who would already be in gr. 11 or 12...they probably don't have many of their other credits, either, or they would probably be placed in workplace sort of set courses where they could get out and earn money if they wanted to. If they really wanted to get out of high school with their peers they would probably take a school-leaving certificate, or come back for a fifth year at the end of grade 12, and maybe do the test...or the course.</p>	<p>don't have a chance, and we let them write the test, it's bad for their morale because they'll bomb it. If they have a good chance of passing its good practice.</p>	<p>to see what the test is like. Looking at the test format, seeing what's on the test is beneficial.</p>	<p>the teacher's classroom] are not even remotely prepared to write.</p>
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Question 2: Does an L2 student's mother tongue have a role in their success on the OSSLT?
(I.E. do students of certain linguistic backgrounds outperform students of other linguistic backgrounds?)

Question 2 was another one of the main research questions that motivated the thesis. Initially, the idea for this question came to me from someone I spoke with at the 2009 Teaching English at a Second Language (TESL) conference. The individual asked me whether or not L2 students of certain backgrounds outperform others, which led me to think about the lack of information regarding the success rates of specific groups of L2 students on the OSSLT. I then considered the possibility that students of certain linguistic backgrounds could have extremely high success rates, whereas others could have abysmal success rates. Furthermore, research

discussed in the background chapter highlighted the fact that L2 students face varying degrees of difficulty when transferring skills from their mother tongue to English (Pérez 1998b; Ionin, Zubizarretta and Maldonado 2008). Both the research discussed in the background chapter and the lack of information on the success rates of specific L2 questions made asking the second question a necessary component of the interviews.

Table 3.2 shows the respondents' answers to the second question. All respondents were able to identify specific groups which performed well or poorly on the OSSLT, but the respondents differed in their opinions of which groups were the most successful with the OSSLT, and the size of the differences in test performance. Three of the four respondents identified European students as an example of L2 students who are successful on the OSSLT, whereas all four respondents indicated that Asian L2 students struggle the most with the OSSLT. Additionally, the fourth respondent felt that there were not large differences in test performance based on an L2 student's background, whereas the second respondent felt that the differences were huge. This is an important discrepancy to note, and may be based on the different experiences of the teachers. As shown in Table 3.2, the second respondent saw a massive transition in her classroom demographics that may have led her to believe that certain groups outperform others. Contrarily, it appears that the fourth respondent has not seen as massive a shift in her classroom demographics from year to year, and has had the experience of teaching a myriad of students from various linguistic backgrounds. The most prevalent theme which emerged from the data in relation to the research question was the notion that European students excel on the OSSLT whereas Asian students struggle, and this is discussed on page 94.

Table 3.2: Responses to Question 2

<p>If they're coming from certain countries in Eastern Europe, where there's already a connection to Western Europe, they're often sort of better setup. If they're coming from African countries, perhaps not...Asian countries it depends...they could've gone to schools in China and had some pretty good English education or some pretty horrible English education.</p> <p>I think that the European kids in particular are particularly setup better, because they're White, they feel like they've got more of a chance.</p> <p>The kids that are successful are the ones that are sort of mainstreaming into English speaking culture. It really is having friends, its being on teams, its being received well in the school, its being accounted for, its being included. That's what schools have to do if they're concerned about the success of those kids they've got to find ways to include them in all sorts of things so that they're just not the ESL learners.</p> <p>The kids that are coming at 14 and 15...they're going</p>	<p>Huge. Last semester very strong because it was mostly European countries, romance languages. Last semester students were from Italy, Germany, France. They understand the world from a Western perspective, if there's a Biblical reference in the text they understand that. Also the moving from German to English. Arabic and Asian students have less of the worldview assumptions built into language. Chinese students have huge struggles with sentence structure, vocabulary.</p> <p>It's not the language of the test, but the lack of prior knowledge. Example of question asking them to write a news report about a car wash – Chinese students and Arabic students don't get the concept – car washes are used as fundraisers, and the Chinese students were writing about how washing a car is</p>	<p>Mother tongue has an impact. Spanish students really excel compared to Chinese students. German students are very strong.</p> <p>The test tries to relate to different backgrounds. Italian and Chinese students knew the noodle story [referring to Section I of the 2009 OSSLT].</p> <p>Chinese students struggle a lot more but are working harder. French, German students familiar w. English TV programs. Chinese students speak Chinese in halls, at home which is a big deal to their language learning. They need to join extracurricular groups.</p>	<p>On the whole, there isn't that big a difference based on background. Iranian students have difficulty with English, Vietnamese students struggle. Sri Lankan and Thai are weaker than Korean international students.</p> <p>Differences are based on circumstances – Burmese students come from refugee camps and haven't had schooling.</p>
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<p>to have a hard time. If they're here by grade 8, most of them can pass the literacy test in grade 10. If they're here in gr 9 that's a bit of a stretch but many of them can still do it because they're still young, If they come in gr 10 or gr 11 you're looking at a different story. You can come at 13 and do pretty well with it. So being on the older side of the testing age...can really work to your detriment. If they come at 13 or 12 it doesn't matter what their alphabet or writing system is...often they can get on track within two years, they're fine.</p>	<p>a great way to spend time with family. Arabic students wrote about how washing a car is a good way to help out your father. The students don't understand that helping out your parents by washing a car is not news.</p>		
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Question 3: How does the OSSLC 'measure up' as an alternative to taking the OSSLT?

Question 3 was based on the final research question that motivated the thesis, and was the final question asked to all four respondents. I wanted to ask this question since extremely little research is available on the OSSLC, and the research available tells us little, if anything about the success rates of L2 students on the course, and whether or not the course is a practical option for L2 students who cannot pass the literacy test.

Table 3.3 shows the respondents' perceptions of the OSSLC as an alternative to the OSSLT. As shown in the table, two of the respondents note that L2 students may not be able to pass the OSSLC, due to a lack of ability to understand and apply the course concepts. For instance, the first respondent believes that inferential thinking and abstract reasoning is beyond

the grasp of some L2 students, whereas the third respondent stated that repetition may not be enough for some L2 students. In addition to providing reasons why L2 students may not achieve success with the OSSLC, the respondents also indicated that the OSSLC is a significantly less rigorous alternative to the OSSLT, and this is discussed on page 98.

Table 3.3: Responses to Question 3

<p>I don't even know the breakdown of the number of kids taking the course who are ESL. I wouldn't even imagine that they're the type of kid that ends up in that course...or you know, they'll get some co-op credits, they'll get a school-leaving certificate.</p> <p>I think that...some kids just don't have the abstract reasoning to complete that type of work at the grade 10 level, so what is it that you're teaching in the literacy course, you're reinforcing decoding skills, basic language comprehension, the idea of sequential processes, but then the abstract reasoning or the inferential thinking is just really hard for those kids...some kids just never...it's never going to come.</p> <p>Some kids come from countries where that type of inferential or critical thinking is not really part of the educational tradition. So those</p>	<p>Fantastic course. Good alternative.</p> <p>Can be a problem for Grade 12 students applying to medical school, who need three senior science credits.</p> <p>They can take the course in summer school.</p>	<p>It allows students the opportunity to demonstrate their literacy skills in a setting different from a test. A lot of the problems with these tests is due to the fact that students cannot demonstrate what they know on the test, but they can do this in the course.</p> <p>The course is the same idea as the test, but it is stretched out over a long period of time, with different units relating to different concepts on the test. The course is boring to teach, the curriculum is very structured with many tasks to teach many times over. The course gives L2 students a lot of repetition and a lot of practice, but sometimes repetition is not enough for L2 students.</p> <p>The course is evaluated in a standard that is less rigorous than the OSSLT. They're usually evaluated on one thing at a time for each writing piece, e.g. structure,</p>	<p>Passing the course doesn't mean anything, L2 students who can't pass the course are the ones who show up everyday, and are sitting in the same class as lazy students.</p> <p>No standard – some teachers have average of 90 – they're not accountable. Other teachers take it more seriously. Some schools, admin doesn't care, others care about how</p>
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kids find it hard initially on the first go-around to do the test because if there's any critical thinking question the little abstract that requires judgment, personal judgment, is not something they're use to doing. They're used to studying a syllabus, memorizing that syllabus and fitting out the answers.		flow of ideas.	we look in the public.
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Themes from Open Coding

As discussed in the methodology chapter, open coding refers to separating data into distinct parts, which are later put back into place (Dey 1999:259). Dey (1999) argues that the researcher needs to identify the parts and combine them, in order to understand the parts and their connection (1999:259-260). When looking at the interview table, I found that there were certain similar ideas that emerged from the comments of the four secondary school teachers. While one respondent might have made a comment that appears distinctive from that of the other respondents, when grouped together the comments from the respondents form part of a theme. For instance, as shown in Table 3.2 and one of the themes below, although the second respondent and the first respondent disagree on the type of connection L2 students need to make with Western culture in order to achieve test success, they still indicate in their comments that L2 students need a degree of familiarity with Western culture in order to be successful. Open coding was an effective way to form broad themes from the interview data, in order to identify specific patterns and trends which help answer three of the thesis' original research questions.

Deferrals have a Minimal Impact

One of the thesis' main research questions pertained to the subject of deferrals, since nearly a third of L2 students are deferred from the test every year. Initially, I wondered how deferrals would affect the progress of L2 students in secondary school. Three of the four teachers did not see any problems with deferrals, stating that they are minimal, that they do not affect the progress of L2 students, and that the students who are deferred repeatedly are not succeeding in other areas of secondary school. In this case, the impact of deferrals on an L2 student's progress in secondary school appears to be minimal. However, one teacher noted that the downside of deferrals is that students will miss the opportunity to practice writing the test. Another teacher highlighted a possible issue with deferrals:

If they really wanted to get out of high school with their peers they would probably take a school-leaving certificate, or come back for a fifth year at the end of grade 12, and maybe do the test...or the course. (Respondent One)

This underscores one of the potential problems with deferrals, in that if L2 students are continually deferred and feel like they have no chance of passing the test, it may be a factor in their decision to leave secondary school prior to graduation. We cannot attribute this problem to deferrals, however, since students are most often deferred when they have no chance of passing the test. Additionally, one teacher noted that bombing the test can have a negative impact on the self-esteem of an L2 student. On the one hand, L2 students who are continually deferred may be inclined to leave school early, however if they bomb the test it may provide them with feelings of hopelessness that influence their decision to drop out of secondary school. In order to solve this dilemma, perhaps secondary school teachers should take on the attitude of the second respondent I interviewed, who emphasized that if students fail the test, they can always take it again, and

that the worst-possible scenario for students would be taking the OSSLC in summer school or in a fifth year of high school.

European Students Excel on the OSSLT, Asian Students Struggle

One of the primary research questions that motivated this study was whether L2 students of certain linguistic or cultural backgrounds outperform other L2 students on the OSSLT. Three of the four teachers indicated that European students excel on the OSSLT. The first respondent noted how students coming from Eastern Europe have a connection with Western Europe, and are “better setup” as a consequence. The second respondent stated that the differences based on a student’s background were huge, and noted how the previous class she had the year prior to the interview was very strong, because it was mostly composed of students from European countries, such as Italy, France and Germany. Finally, the third respondent indicated that both Spanish and German students excel.

On the other hand, all four teachers noted that Asian students struggle with the OSSLT, and had differing opinions as to why Asian students in particular have difficulty with the test. The first respondent stated that an Asian student’s success may depend on the quality of education they received in their home country, arguing that some Chinese students receive high quality education whereas others receive a substandard quality of education. The second respondent stated that Chinese students have tremendous struggles with sentence structure and vocabulary. She also felt that “Asian students have less of the worldview assumptions built into language,” which influences their performance on the test. For instance, on a test question that

asked students to complete a news report about a carwash, she noted that Chinese students could not understand that carwashes are used as fundraisers. Instead, Chinese students wrote about how washing cars is a good way to spend time with family. The third respondent stated that while Chinese students are working very hard, they struggle a lot more with the test than others. Finally, the fourth respondent noted that Vietnamese students struggle with the test, but that many of the differences on test success are based on circumstances. This is similar to the first respondent's statement that a Chinese student's success depends on the quality of education that they received in China.

Perhaps one of the circumstances that explains the differences in test performance is the age in which a student starts learning English, as noted by the first respondent. He argued that a student's chance of achieving fluency will increase as the age in which they begin learning English decreases. The first respondent explained how students who arrive to Canada during the eighth grade are more likely to succeed on the test than students who arrive in the tenth or eleventh grade. Information from the Ontario government's ESL curriculum indicates that students may need anywhere from five to seven years to become sufficiently fluent in English (People for Education 2002:4), which could explain the respondent's observations that students who arrive to Canada at a later age are more likely to have problems with the test. Overall, however, all four teachers were synonymous in their belief that Asian students struggle with the OSSLT.

The Importance of a Connection with Western Culture for Test Success

The most prevalent theme that emerged from the four interviews conducted was the need for L2 students to have familiarity with Western culture in order to achieve success on the OSSLT. All respondents except the fourth respondent emphasized the importance of a connection with Western culture.

Both the first and third respondent highlighted the need for L2 students to be familiar with L1 culture in order to be successful:

French, German students are familiar with English TV programs. Chinese students speak Chinese in the halls and at home, which is a big deal to their language learning. (Respondent Three)

The kids that are successful are the ones that are sort of mainstreaming into English speaking culture. It really is having friends, it's being on teams, it's being received well in the school, it's being accounted for, it's being included. That's what schools have to do if they're concerned about the success of those kids. They've got to find ways to include them in all sorts of things so that they're just not the ESL learners. (Respondent One)

The comments from the third respondent show that Western European L2 students are more successful than Chinese students, because they are more familiar with elements of L1 culture such as television programs. As previously discussed in the background chapter, L2 groups are more likely to become fluent in English depending on the degree to which they interact with the L1 group. It is likely that Western European students would forge connections with their L1 peers, based on shared interests in L1 culture. By communicating regularly with their L1 peers, L2 students would learn more about L1 popular culture, which has a role in their success according to the first respondent. The comments from the first and third respondents thus

highlight the importance of forming connections with L1 culture in order for L2 students to attain success.

Contrary to the first and third respondents, the second respondent argued that an L2 student's ability to connect with the West depends on their mother tongue.

Last semester students were from Italy, Germany, France. They understand the world from a Western perspective, if there's a Biblical reference in the text they understand that. Also the moving from German to English. Arabic and Asian students have less of the worldview assumptions built into language. (Respondent Two)

According to the second respondent, the more successful students have an easy transition from their mother tongue to English, because they understand the cultural assumptions built into the English language. To illustrate this point, the respondent used the example of the carwash question, wherein Asian and Arabic students could not understand that washing cars was a fundraising activity that was newsworthy. Instead, they wrote about the positive aspects of a family washing a car on a sunny afternoon for no other purpose than to clean the car, which is not newsworthy. The respondent thus showed how an L2 student's mother tongue plays a role in their ability to connect with Western culture, and that students who have such a connection are more successful.

Three of the four respondents argued that L2 students need to have a connection with Western culture in order to attain success. However, two of the respondents argued that L2 students need to become integrated into Western culture, whereas the second respondent argued that L2 students need to have a linguistic connection with the English language that depends on their mother tongue.

The OSSLC is a Less Rigorous Alternative to the OSSLT

Finally, the last theme from the interview data revolved around one of my main research questions, which sought to determine whether the OSSLC represents a good alternative to the OSSLT. Two of the four secondary school teachers indicated that the OSSLC is much less rigorous than the OSSLT. The fourth respondent argued that passing the course is meaningless, and that some teachers do not take the evaluation of the course very seriously, which shows in their high course averages. The third respondent also felt that the OSSLC is evaluated in a standard that is less rigorous than the OSSLT. The respondent explained that this is because students are graded on one aspect of their writing at a time, such as grammar, sentence structure, or flow, whereas on the OSSLT students are graded on all aspects of their writing at the same time. These comments are of some concern to those who feel that the OSSLC is indeed a less rigorous alternative to the OSSLT. Some would likely have concern over the idea that a student who would ordinarily fail the OSSLT would be able to easily pass the OSSLC. While it is clear from the interview data that the OSSLC is a less rigorous alternative, it is difficult to determine whether its lack of difficulty is due to the method in which it is evaluated, or because some teachers are simply inflating their course averages. The third respondent mentioned how the course follows a designed curriculum and has a lot of repetition, which means that students would spend a lot of time learning the core skills evaluated by the OSSLT, likely adding to their success with the course. Ultimately, one must question the purpose of the OSSLT given that there is a much easier course that students are allowed to take upon failing the test.

While the course is less rigorous, two respondents warned that it might not be any easier than the OSSLT for some L2 students.

Some kids just don't have the abstract reasoning to complete that type of work at the grade 10 level, so what is it that you're teaching in the literacy course, you're reinforcing decoding skills, basic language comprehension, the idea of sequential processes, but then the abstract reasoning or the inferential thinking is just really hard for those kids...some kids just never...it's never going to come. Some kids come from countries where that type of inferential or critical thinking is not really part of the educational tradition. (Respondent One)

This type of comment highlights the need for a thorough inquiry into the strategies used to reach students of different social and linguistic backgrounds, in order to ensure that they leave secondary school with an adequate level of proficiency in English. The L2 student could repeatedly fail the OSSLT and take the OSSLC, only to pass the course easily and leave school unprepared to deal with the level of English required in post-secondary education and the workplace. The most dangerous aspect of the OSSLC is that we have no way of telling how many L2 students are passing or failing the course, since such statistics are left unpublished by the EQAO. Consequently, provincial officials need to review the purpose of the OSSLT and OSSLC, as well as provide the public with more information about the course, including pass rates.

CHAPTER 4:

DISCUSSION

The purpose of this final chapter is to address the implications of the study, as well as provide some overall conclusions to the thesis, including a discussion of the limitations of the study and suggestions for future research. The chapter will begin with a discussion of some of the implications of the content analysis and interviews for L2 students, test designers, and provincial officials. Next, some overall conclusions to the thesis will be provided, such as the limitations of the study, suggestions for future research, and a reaffirmation of the overall goal of the thesis.

Implications of the Study

Content Analysis

The Coh-Metrix analysis showed that test designers may need to make changes to their selection of reading passages. Although for the most part the reading passages for both versions of the OSSLT were consistent in their LSA, hypernymy, word frequencies and concreteness scores, the analysis showed that test designers still need to consider a few key factors when selecting reading passages for future versions of the OSSLT. For instance, passages such as Section I of the 2008 OSSLT that have a considerably low word frequency average should be omitted. The large number of infrequent words in the passage makes it very difficult for L2

students to decode and understand the passage in an efficient manner. It would thus be wise for test designers to undertake Coh-Metrix analyses of each prospective reading passage, in order to determine if the reading passages are consistent in their level of readability.

While the Coh-Metrix analysis exposed the consistencies that exist in the difficulty level of the OSSLT for L2 students based on the measures of readability chosen, the VocabProfile analysis showed some of the inconsistencies that exist in both the 2008 and 2009 versions of the OSSLT. For future versions of the OSSLT, test designers must exercise caution when placing AWL and OL words into each multiple choice and short answer question. Whenever possible, AWL and OL words should be replaced with K1 words in order to make the questions clearer for L2 students to read and understand. Replacing AWL and OL words with K1 words will not make it any easier for students to respond to a question. Rather, it will only make the question clearer. For instance, I could create two test questions:

1. Demonstrate your ability to use AWL words by generating three sentences with AWL words.
2. Write three sentences with AWL words to show your ability to work with AWL words.

The first question contains two AWL words, whereas the second question contains none. The important thing to note is that I am essentially asking the same question, however the second question would be much clearer to L2 students because it contains no AWL words. Some might argue that a question with AWL words is testing a student's ability to read and understand difficult words. If we evaluate the test using that line of thinking, we are really only testing a student's vocabulary and the extent to which they are familiar with challenging words, as opposed to their reading and writing abilities. A student's ability to clearly answer a question would be much more marketable to prospective employers and post-secondary institutions than vocabulary knowledge. Furthermore, it is unfair that some L2 students would not be able to

answer the question properly when they would be able to do so if the question used clearer words. The findings of the VocabProfile analysis showed that AWL and OL words are placed in areas of OSSLT multiple choice and short answer questions that could cause needless difficulties to L2 students, since most of the words could be easily replaced by K1 words. Test designers thus need to run VocabProfile analyses on each future multiple choice and short answer question if they want to ensure the clarity of the questions for L2 students.

The original research question that motivated the content analysis asked whether the language of the test causes difficulties for L2 students. While the reading passages selected are fairly consistent in their difficulty levels, the VocabProfile operations showed that test designers need to take some time to consider how the placement of certain words in multiple choice and short answer questions could have an impact on the difficulty level of the questions for L2 students.

Interviews

While the content analysis helped answer one of the thesis' original research questions, interviews were used to answer the three remaining research questions that motivated the study. The questions sought to explore the impact of deferrals on L2 students, the role of a student's mother tongue in relation to their success on the OSSLT, and whether or not the OSSLC is a good alternative for L2 students. The results from the interviews showed that deferrals have a minimal impact on L2 students, however three important implications from the interview findings were related to the other two research questions. The three implications from the interviews include the various needs of specific L2 students when learning English as a second

language, the importance of forming a connection with Western culture for L2 students, and the idea that the OSSLC undermines the purpose of the OSSLT.

One of the biggest implications of the interview findings is the notion that more time and research needs to be spent determining the different linguistic needs of various L2 students who are learning English. The results from all four interviews show that L2 students coming from certain linguistic groups have a harder time learning English than others. According to some respondents, this will affect their progress on the OSSLT, and will perhaps even have an impact on their success on the OSSLC. This is especially the case for L2 students who are not used to abstract reasoning or critical thinking, as indicated by the first respondent. Ontario's ESL and ELD curriculum makes note of some factors involved in second language acquisition, but it does not acknowledge the possibility that certain L2 students may need a specific set of skills instructed to them in order to learn English, depending on their mother tongue (Ontario Ministry of Education 2007a:9-11). As a society, we want to ensure that all L2 students receive the highest quality of English instruction possible, in order for L2 students to become successful in post-secondary education and the workplace. A one-size-fits-all approach to teaching English will not give all L2 students the quality of education that they require. Instead, it could result in L2 students becoming flustered with the OSSLT or OSSLC and leaving secondary school as a result.

What possible solutions are there to this dilemma? Surely, we cannot form separate ESL classes and hire specialized teachers to teach every Cree, German, Taiwanese or other L2 student English in a way that caters to their specific learning needs. What we can do, however, is provide

more support to after-school education and community initiatives which seek to better the learning process of each L2 student according to their own learning needs.

Another implication of the interview findings stems from the importance of a connection with Western culture, which was one of the key indicators of an L2 student's success on the OSSLT. As one respondent noted, "it's not the language of the test, but the lack of prior knowledge." Some L2 students could simply not grasp the idea that a carwash could be used as a fundraising activity, as opposed to an opportunity to help family members. Test designers need to understand and take into account the idea that L2 students may not grasp some of the idiosyncrasies associated with Western culture.

There are a number of ways to solve this problem, and many are already underway in many schools. In the short term, test designers need to be extremely conscious of the scenarios they establish when creating test questions and selecting reading passages. The goal of the test is to examine a student's school-related literacy abilities, as opposed to determining the degree to which they are culturally integrated. One teacher explained how important it is for students to be included in school culture, and many schools have a number of avenues which allow L2 students to participate in activities with their L1 peers. Provincial officials, school boards and teachers thus need to continue to encourage L2 students to participate in school activities. Outside of school, parents and community members can also play a role in encouraging L2 students to get involved in school activities. Essentially, we need to facilitate as much interaction as possible between L2 and L1 groups, in order for L2 students to pick up on some of the "prior knowledge" L1 students carry. This prior knowledge will not only serve them well in adapting to the school

environment, but will also help them with quizzes, tests, assignments and in-class discussions that involve the idiosyncrasies of Western culture.

Again, one of the thesis' original questions sought to explore the impact of an L2 student's mother tongue on their success with the OSSLT. The findings from the interviews showed that mother tongue does play a role, that L2 students do not all learn English in the same way, and that some L2 students are more engaged with Western culture than others. Consequently, more attention needs to be devoted to programs that focus on the specific sets of skills that L2 students need to develop in order to improve their proficiency in English. Additionally, test designers need to be conscious of questions and scenarios they use which might be confusing to students unfamiliar with aspects of Western culture. Finally, teachers, parents and community members need to continue facilitating the social integration of L2 students into Ontario secondary schools in order to help L2 students form a connection with Western culture.

One final implication of the interview findings is the way in which the OSSLC undermines the purpose of the OSSLT. Teachers are not unanimous as to whether the OSSLC is a good alternative for L2 students, but the results of the interviews show that the course is evaluated in a much easier standard than the OSSLT, and appears to be readily available to L2 students in summer school or the school that they currently attend. If a student knows that failing the OSSLT is inconsequential, how will it have an impact on their test performance? One respondent even commented how L2 students are placed with "lazy students", and teachers who may not care about their class average.

This does not mean, however, that the course should be scrapped, or that we should look for a tougher alternative to the test. Perhaps we need to look for a more effective way of measuring the literacy abilities of secondary school students altogether. Alternatively, since the test seeks to ensure that students have acquired a certain level of reading and writing skills by the end of Grade 9 (EQAO 2008:1), perhaps a different initiative should be undertaken. Statistics could be compiled on the average English grades of Grade 9 students on a couple of specific tests and assignments, with no high-stakes attached. Rather, the tests or assignments would form part of the evaluation for the student's Grade 9 English coursework. This would ensure that students cared enough about the test or assignment to complete it to the best of their ability, and it would do away with unnecessary standardized tests and courses. With modern technology, it would be easy and inexpensive for teachers to electronically submit grades for the tests and assignments to the province. Of course, detractors of this idea would argue that evaluation is subjective, and that some teachers would not grade tests or assignments properly. With this logic, every student could pass every course on a whim, and every secondary school diploma would be based on a lie, since the student might have encountered a few teachers who gave them too many evaluative breaks. Ultimately, having the province distribute one or more tests or assignments that are woven into the student's Grade 9 English course would be an effective way to measure the literacy abilities of all Grade 9 students, without the administration of costly high-stakes tests and the implementation of courses which negate the very purpose of the tests.

The thesis' last research question sought to explore the impact of the OSSLC on L2 students. The interviews showed that the OSSLC is significantly less rigid in its structure than

the OSSLT, and may be a positive alternative for some L2 students who are struggling with the test. Additionally, the interview data showed how the OSSLC undermines the purpose of the test, as failing the test is inconsequential when a much easier course is readily available as an alternative.

Overall Conclusions

The implications of the interview findings showed a need to increase English instruction to L2 students based on their specific needs, as well as to facilitate more interaction between the L1 group and L2 students. Perhaps most surprisingly, the implications of the interview findings indicate that the OSSLT appears to be lacking in its overall objective, since it is being undermined by the OSSLC. This might result in a need for provincial officials to focus on developing a more effective and inexpensive way of measuring the literacy abilities of secondary school students.

While the implications highlighted important issues for L2 students, test-designers and provincial officials, we must bear in mind that the research conducted in this thesis was bound by certain limitations. With regards to the content analysis, there was a limited ability to define the range and meaningfulness of the scores found with the Coh-Metrix results. While we can compare the numbers, we are unable to specifically determine the extent to which one reading passage would cause more difficulty for L2 students over another. Additionally, since the variables used to measure readability came from a variety of databases, it would be difficult to determine whether a seemingly low score in one area would provide problems for an L2 student

in an Ontario secondary school more than a supposedly high score in another area. This obstacle, as well as the fact that L2 students in Ontario are at vastly different proficiency levels in English, makes it very difficult to make any generalizations about the difficulty of the reading passages for L2 students. Likewise, the differences in English proficiency amongst L2 students make it challenging to determine the extent to which the use of specific AWL or OL words in multiple choice and short questions would have an impact on an L2 student's test performance.

In order to further the use of the Coh-Metrix and VocabProfile tools as ways of measuring readability, I suggest that a comparison of writing samples from a class of ESL students and a class of Grade 10 students studying English in the academic stream would be extremely worthwhile. First, this would give us an idea as to the range of LSA, hypernymy, word frequencies and concreteness values that L2 students and L1 secondary school students are using in their writing. Secondly, we could also determine the extent to which both groups use K1, K2, AWL and OL words. This work would be in line with the research conducted by Crossley et al. (2007) and Laufer and Nation (1995), but would use Ontario L2 students and L1 secondary school students as its subjects of analysis. This would strengthen our ability to analyze the difficulty of the OSSLT, since we would have a sense as to the ability of L2 students to work with reading passages or multiple choice and short answer questions that have certain levels of LSA, hypernymy, word frequencies and concreteness values, or K1, K2, AWL and OL words.

Now that the results of the content analysis have been explained, it would be worthwhile to reconsider whether the OSSLT is structured in a way that fits with the autonomous or ideological model of literacy, as outlined by Street (1984). As discussed in the background

chapter, it initially appeared as if the test was structured in a way that adhered to the autonomous model of literacy, as it sought to evaluate and measure a uniform standard of literacy skills students should have obtained at the time of writing the test. The test itself ignores several other forms of literacies that students are currently engaged with, such as technological literacy, which shows the test's lack of emphasis on changing societal patterns that have transformed society's definition of literacy. In spite of its goal of linearly measuring a uniform standard of literacy skills, the content analysis has shown that the test relies on many aspects of Street's ideological model of literacy. Many of the test's questions are rooted in the culture of the L1 group, such as those which make reference to dinosaurs, volunteering, and as explained by one interview respondent, the importance of a carwash as a fundraising activity. Consequently, the purpose and overall goal of the test appears to define literacy in an autonomous way, whereas the content of the test seems to define literacy in a way that is more ideological than the creators of the test may have intended.

In terms of the limitations of the interview findings, three of the four current secondary school teachers taught in schools where the majority of L2 students were of Asian descent. Hence the theme from the open coding which indicated that Asian students tend to struggle likely has much to do with the demographics of the schools in which three of the four teachers taught English. It would be worthwhile to investigate more schools with different demographics in order to obtain more data on the matter, however due to time constraints this was not possible.

In order to further the data found in the interviews, I suggest a comprehensive study that looks at the OSSLT success rates of L2 students from a multitude of schools and communities.

While we know from interviewing four qualified secondary school teachers that European students excel and that Asian students struggle, little is known as to the abilities of Arabic, African, South American, Latin American, Cree, or other groups of L2 students on the OSSLT or OSSLC. I also recommend that the study also go beyond simple pass/fail rates, and attempt to delve into the reasons why some L2 students struggle with the OSSLT and with second language acquisition in general. Such research could help uncover some of the challenges these students face, and would be the first step in helping students better their proficiency level in English.

The overall goal of this thesis was to provide research to an area that is substantially lacking in information. I sought to add to this area by investigating four original research questions, in a way that looked at both the content of the test and explored the perceptions of secondary school teachers who encounter L2 students in their schools everyday. Through the results of the content analysis, we now know that the test is fairly consistent in the difficulty of its reading passages, however certain multiple choice and short answer questions contain words that might cause difficulty to L2 students and hinder their performance on the OSSLT. From the findings of the interview data, we now know that deferrals have a minimal impact on L2 students, that European L2 students excel on the test whereas Asian students struggle, that a connection with Western culture is important for an L2 student's success, and that the OSSLC is significantly less rigorous than the OSSLT. The results of this thesis thus provided much information to an area where there is a significant lack of research.

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