Test-Takers' Background, Literacy Activities, and Views of the Ontario Secondary School Literacy Test

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This study examined the relationships among students' background information and their inschool and after-school literacy activities, as well as the relationships between students' background and their views of the Ontario Secondary School Literacy Test (OSSLT). The results showed that students' literacy activities could be grouped into three types: e-literacy, traditional literacy, and creative literacy. Furthermore, results showed that categorization of literacy activities depended on whether the activities were conducted in English or in another language. Gender predicted certain types of literacy activities. Compared with English-as-a-first-language (L1) students, English-as-a-second-language (L2) students' background influenced more of their views of the test.

Cette étude a porté sur les rapports, d'une part, entre les antécédents des élèves et leurs activités scolaires et parascolaires en matière d'alphabétisation et, d'autre part, entre ces renseignements généraux et la perception qu'ont les élèves du test provincial de compétence linguistique de l'Ontario (TPCL). D'après les résultats, il est possible de regrouper les activités d'alphabétisation des élèves en trois catégories : l'alphabétisation électronique, l'alphabétisation traditionnelle et l'alphabétisation créative. De plus, les résultats indiquent que la catégorisation des activités d'alphabétisation dépendait de la langue dans laquelle se déroulaient les activités (anglais ou autre). Le genre constituait une variable prédictive de certains types de ces activités. Les antécédents des élèves dont l'anglais était la langue seconde influençaient plus leur perception du TPCL que ceux des élèves pour qui l'anglais était la langue maternelle.

The past two decades have witnessed a dramatic increase in the numbers of immigrants to Canada. Canadian Immigration and Citizenship (2003) concluded that the numbers of immigrants in 1985 were 84,335, forming 0.3% of the total population. In 2002 the numbers reached 229,091, 0.7% of the population although the proportions are much higher in some regions because immigrants are distributed variably across the country. Immigrants commonly arrive with their families, so similar increases in the population of school-aged immigrant students are also being reported. These students bring ethnic, linguistic, and cultural diversity to their respective schools. However, they face immense learning and communication challenges as they often have little English or speak English as a second language (L2 students, Watt & Roessingh, 2001). The effect of these challenges on L2 students' academic success is exacerbated

in educational jurisdictions that include high-stakes literacy testing.

Ontario is one example of an educational jurisdiction that has a high-stakes literacy test. The Ontario Secondary School Literacy Test (OSSLT) is a provincially mandated large-scale test of English literacy. Successful performance on this test or a subsequent specific literacy course is a graduation requirement for all Ontario secondary school students. Approximately one in four students who wrote the October 2003 OSSLT reported that their first language was one other than English (Education Quality and Accountability Office [EQAO], 2003), and this proportion appears to be relatively stable (EQAO, 2007). These L2 students have much lower success rates than the overall population of OSSLT test-takers (EQAO, 2003, 2006, 2007). These lower success rates exist even though a greater proportion of L2 students also do not write the OSSLT. Only 51% of L2 students who fully participated in the 2006 administration passed the test, and 52% passed in 2007. In contrast, for all the students who took the test, the overall pass rates were 84% for 2006 and 2007 (EQAO, 2007). Given these discrepancies, it is important to study L2 students who are still in the process of developing their language abilities while participating in academic study. It is possible that these L2 students' abilities to complete the OSSLT successfully are affected by other factors not relevant to the constructs being tested, but specific to their personal background and educational history (Bachman, 2000; Cheng, Fox, & Zheng, 2007; Fox & Cheng, 2007; Kunnan, 1998).

The purpose of this study was to examine the relationships among these students' backgrounds, literacy activities, and views of the OSSLT. Students' background included their sex, parents' education, and whether English was their first language. Our student participants were grouped in two ways. First, they were defined as L1 if their first language was English and they were born in an English-speaking country. Students were defined as L2 if their first reported language was not English and/or if they were born outside an English-speaking country. We recognize that this is a simplified description of these students' characteristics, but because our study focus was on the nature of language development, we chose to use L1 and L2 for the purpose of easy reporting. Second, students were grouped based on whether or not they had taken the OSSLT when we administered our questionnaire. Through the use of questionnaires, we examined these students' literacy activities in school and after school in both English and where applicable, in another language. Students' views of the OSSLT included (a) their perceptions of the test, (b) their knowledge of the test, and (c) their test preparation practices for the test. We were interested in the following research questions.

- 1. What is the relationship among the OSSLT test-takers' background (sex, parents' education, and home language) and their in-school and after-school literacy activities?
- 2. What is the relationship among the OSSLT test-takers' background (sex, parents' education, and home language) and their perceptions and knowledge of the test, as well as their test preparation practices?

Context

Determining the magnitude and causes of low achievement in education among L2 students is a challenging task (Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Klesmer, 1994). Earlier studies have demonstrated that these students' personal backgrounds influence their language development (Abedi, Leon, & Mirocha, 2003; Gradman & Hannania, 1991; Roessingh

& Kover, 2002). Parents' educational levels and occupations, home language(s), and years of stay in English-speaking countries are among the important background indicators of L2 students' success in English development (Collier & Thomas, 1989; Fehrmann, 1987). Relative to L1 students, L2 students are affected by more external factors, and these background characteristics must be taken into consideration to gain a better understanding of the extraneous factors that influence and challenge L2 students in their academic studies and literacy achievement. According to Klesmer (1994), these factors may include L2 students' sociolinguistic history, migration history, past schooling experiences in their native countries, and motivation and attitudes toward their new culture.

As also found with first-language students, variations in L2 students' educational outcomes are associated with their parents' education levels (Finnie & Meng, 2003). Students from more educationally advantaged family backgrounds continue to have greater access to quality education and to financial and cultural capital to support their educational activities, which result in higher levels of achievement (Wendling & Cohen,1980; Willms, 1997). As an example, Wendling and Cohen found that approximately one half of the mean scores on reading and math could be accounted for by this factor. In contrast, some earlier research has found the relationship between parents' educational and students' academic achievement to be weak (White, 1982).

Earlier studies also provide support for the investigation of literacy activities and language factors in relation to L2 students' literacy development. First, the use of English at home is important in predicting English literacy levels (Finnie & Meng, 2003; Gardner, Polyzoi, & Rampaul, 1996; Montigny, Kelly, & Jones, 1991; Tuijnman, 2001; Watt & Roessingh, 1994; Willms, 1997). The hours and types of after-school reading and writing in English represent variety in the exposure to English and have been shown to be important predictive variables by Montigny et al. and Early (1992). Studies also suggest that the extent of knowledge and exposure to English literacy materials in schools are among the key factors in English-language development (Emmitt, Pollock, & Komesaroff, 2003; Tarone, & Bigelow, 2005). Still other research focusing on out-of-school literacy notes the pivotal role of these activities on students' literacy development (Hull & Schultz, 2001). For students whose home language is other than English, literacy activities in their home language also appear to be important predictors of subsequent literacy achievement. However, these associations are complex. Literacy activities in one's home language and in English can demonstrate variable structures, values, and expectations (Gay, 1988; Snow, 1992). Such research highlights the ongoing need to examine both in-school and out-of-school activities in our efforts to understand students' literacy development.

Increasingly, computer use is an important factor to include in our research on students' literacy achievement. As computers have become more accessible in schools and homes, they have the potential to be an integral part of the educational process that supports students' literacy development both in school and at home (Liu, Moore, Graham, & Lee, 2003; Wartella & Jennings, 2000). The increasing amount of time students spend on computers at home raises questions of how computer technology may positively affect learning (Subrahmanyam, Kraut, Greenfield, & Gross, 2000). As texts are freed from the physical medium, our common definitions of textuality and the processing of text are questioned. At the same time, we need to consider the sociocultural effects of the shift to digital text (Kress, 2003). Digital technology results in new forms of literacy that represent multiple modes (Kress, 2003; Lankshear & Knoble, 2003; Street, 2007). Coupled with the various ways students continue to pursue both

English and other languages at home, access to digital technologies will probably affect subsequent literacy achievement for our students. Hence it is essential to explore students' inschool and after-school computer-mediated literacy activities in order to gain a better understanding of the relationship between literacy development and computer access.

Earlier examinations of the OSSLT demonstrated that it is not only an English literacy test (an academic content test), but also to a large extent a language proficiency test for L2 students. For these students, the test primarily determines their level of English-language proficiency rather than literacy (Cheng, Fox, & Zheng, 2007; Fox & Cheng, 2007). Hence a high-stakes literacy examination presents a unique challenge to L2 students whose English-language proficiency is still developing (Cheng, Klinger, & Zheng, 2007). Moreover, various factors come into play with students' test performance on high-stakes tests such as the OSSLT, especially considering the heterogeneity of the cultural and linguistic backgrounds of the L2 test-takers (Cheng, Klinger, & Zheng, 2009; Fox & Cheng, 2007). Therefore, it is important to gain a better understanding of the literacy-related background/activities that OSSLT test-takers (both L1 and L2) bring with them that will positively or negatively influence their literacy test performance.

Method

To address the research questions, we developed and distributed a questionnaire to a sample of grades 10 and 11 students in Ontario. The questionnaire was composed of three major sections. The first elicited background information about the students. Questions included gender, age, parents' educational level and occupation, courses being taken, language(s) spoken at home, and years of stay in an English-speaking country if they were born outside Canada. The second section focused on in- and after-school literacy activities. The third probed the students' views of the OSSLT including their perceptions and knowledge of the OSSLT, as well as their test preparation practices. The data were based on both Likert-scale questions and open-ended questions. Here we report the students' responses on the Likert-scale questions.

Students from four secondary schools (three public and one private) from two school boards in eastern Ontario participated in the study. These schools were chosen because they had large populations of both L2 and L1 students. Parents' permission was obtained before the students completed the questionnaire. Grades 10 and 11 students who had not written the OSSLT (n=219) completed Version 1 of the questionnaire (see Appendix B), designed for students who were preparing to write the test. Grade 11 students (n=315) who had previously taken the OSSLT completed Version 2. The major differences between the two versions of the questionnaire were in the third section, which contained items focusing on students' knowledge of the OSSLT either before or after they had taken it.

Data Analyses

Descriptive statistics of the data were first obtained to gain an overall picture of the students' background and their questionnaire responses. An illustration of the students' background information provided a closer look at the characteristics of this group of OSSLT test-takers.

To understand the associations among the students' background and their literacy activities, the following data analysis steps were taken. First, aggregate variables were created based on the original dataset. For example, literacy activities were generated based on three sets of exploratory factor analyses (EFA). The first set of analyses included students' after-school

literacy activities in English; the second included students' after-school literacy activities in another language; the third included students' in-school literacy activities in English.

Scale scores from these EFA analyses were generated by summing the variables that loaded onto the same factor. These literacy factors were used as dependent variables in our investigation of the association among students' background and their literacy activities. The independent variables included sex, mother's education level, and home language. Mother's education level was used as an index of parents' education level. Next we examined the associations among students' background and their perceptions and knowledge of the test and their test preparation practices. Initially, new outcome measures of students' views about the OSSLT were created, aggregating the variables of (a) perceptions of the test, (b) knowledge of the test, and (c) test preparation practices. Stepwise regression procedures were used for each of these three constructs using the students' background including sex, mother's education level, and the language variable as predictors. In a stepwise manner, at each step of the sequence, one variable is added to the regression equation. The variable added is the one that makes the greatest reduction in the error sum of squares of the sample data. Equivalently, it is the variable that when added, provides the greatest increase in the F value. Also, variables the importance of which diminishes as additional predictors are added are removed (Norusis, 2002). A variable of mother's education was created on a scale of three: 1 for primary-level, 2 for secondary-level; and 3 for college/university level and above.

Results

When the questionnaire was administered, 41% (n=219) of the total sample (n=534) had not written the OSSLT (the pre-test group), and 59% (n=315) had taken the OSSLT (the post-test group). Most of the students were from one of the three public schools, and 11.9% (n=62) were from the private school. The sample was composed of 47.4% (n=253) male students and 51.5% (n=275) female students; 1.1% of students did not indicate their sex in the questionnaire. Of the students who had not yet written the OSSLT, 56.6% belonged to the L1 group. Of the students who took the test, 63.5% belonged to the L1 group (n=67), with 90.4% reporting that they had passed the test. The passing rate for the L2 group (36.5%, n=93) was 82.8%.

The most frequently reported after-school literacy activity was browsing websites (M=4.06; SD=1.40). The most frequently reported writing activity was writing emails (M=3.87, SD=1.48). Similar results for after-school literacy activities in English were reported by Cheng et al. (2009) for the 2003 OSSLT administration and students' responses to the questionnaire distributed by Ontario's EQAO.

The after-school literacy activities in another language were reported by the L2 group. Although literacy activities conducted in another language were generally less frequent in another language, the most frequently reported literacy activities were the same as those conducted in English, that is, the most frequent reading activity was *browsing websites* (M=2.26, SD=1.49), and the most frequent writing activity was *writing emails* (M=2.21, SD=1.52). Students' times for literacy activities in school were converted to percentages. They reported that *reading text* took up most of their in-school reading time (16.80%), and *writing notes* was the most frequently reported in-school writing activity (10.44%).

Students' views of the OSSLT were analyzed from their perception of the test, their knowledge of the test, and their test preparation practices. Descriptive statistics indicated that students' views of the OSSLT varied according to their group membership. Those who had not

taken the test generally reported more positive perceptions of the OSSLT. Not surprisingly, these students also reported less knowledge of the OSSLT and fewer test preparation activities. Compared with the L1 group, the L2 group had lower values in all three investigated aspects.

Students' Background and Literacy Activities

The relationships among students' background and their literacy activities were investigated using their in-school and after-school literacy activities in English and where applicable, in their after-school activities in another language. Independent exploratory factor analyses were conducted with the three types of literacy activities above, using the full sample (n=534) for the after-school and in-school literacy activities in English and the reduced L2 sample (n=143) for the literacy activities in another language.

The first set of EFA used maximum likelihood with direct oblimin rotation to extract the factors in the students' after-school literacy activities in English (this rotation method was used because unlike orthogonal rotations, direct oblimin rotation permits factors to be correlated, Fabrigar, Wegener, MacCallum, & Strahan, 1999). Factor loadings larger than 0.3 were reported because values above this cut-off are conventionally regarded as having a "meaningful loading" (Pedhazur & Schmelkin, 1991, p. 603). All 16 items in this section had higher than the 0.3 factor loadings on at least one factor, and only one variable had a double loading.

There were three clusters of after-school literacy activities in English: English e-literacy activities, English traditional literacy activities, and English creative literacy activities. These three factors explained 49% of the total variance. The eigenvalues for these three factors were all above 1 (6.13, 1.61, and 1.27 respectively). Descriptive statistics for these students' after-school English literacy factors (Mean, Standard Deviation, Internal consistency) as well as the relationships among the three factors are presented on the first horizontal panel in Table 1. The correlation matrix confirmed that these factors were moderately correlated (.32, .34, and .66). Factor 1, English e-literacy activities, included two items, reading websites, email, chat-rooms, and text messaging and writing emails and chat-room conversations. This factor had a low level of internal consistency (alpha=.45). Factor 2, English traditional literacy activities, contained 10 items and had a high level of internal consistency (alpha=.87). The items that loaded onto this factor included reading newspapers, reading manuals and instructions, writing notes, directions, and instructions, reading non-fiction books, reading letters, reading religious or spiritual writings, reading magazines, reading novels, fiction, and short stories, reading comics, and work-related writing. Factor 3, English creative literacy activities, contained four variables and had an internal consistency of .83. The items loading onto this factor included reading poetry and song lyrics, writing song lyrics and poetry, writing letters, journals, and diaries, and writing short stories and fiction. One variable, writing short stories and fiction, had a loading of .50 with English creative literacy activities and .30 with English traditional literacy activities. Considering the factor loading sizes and the nature of this variable, it was considered one of the four items in English creative literacy activities.

A sample of 143 students who reported reading and writing in another language filled out the section on literacy activities in another language. The factor loadings also suggested three factors, with items loading slightly differently from the first set of EFA analysis reported above. These three factors explained 68.72% of the total variance. The eigenvalues for these three factors were all above 1 (9.63, 1.18, and 1.12 respectively). Although the three-factor structure explained more variance than that found for English (68.72% vs. 49%), there were more double

Table 1

Descriptive Statistics, Reliabilities, and Zero-order Correlations of Literacy Activity Factors

		No. of			CD D !! !!!!		on	
	Factor	Variables	Mean	SD	Reliability	E- literacy	Traditional literacy	Creative literacy
English at Home	e-literacy	2	7.97	2.75	.45			
	traditional literacy	10	20.95	8.40	.87	.34*		
	creative literacy	4	7.92	4.53	.83	.32*	.66*	
Another Language	e-literacy	2	4.48	2.87	.89			
at Home	traditional literacy	7	11.50	6.90	.91	.69*		
	creative literacy	7	12.03	7.06	.91	.71*	.79*	
English at School	e-literacy	3	6.76	3.62	.87			
	traditional literacy	8	19.30	5.81	.75	.26*		
	creative literacy	4	5.51	2.34	.64	.29*	.32*	

Note. * p < 0.05.

loadings across these items for another language. The five variables with double loadings included reading websites, emails, chat-rooms, and text messaging, writing song lyrics and poetry, reading novels, fiction, and short stories, writing notes, directions, and diaries, and writing letters, journals, and diaries. An inspection of these variables led us to decide that each item would be best categorized into the factor having the higher factor loading. Descriptive statistics for these students' after-school literacy factors in another language (Mean, Standard Deviation, Internal consistency) as well as the relationships among the three factors are presented on the second horizontal panel in Table 1. The correlations among the factors were .69, .79, and .71 respectively.

Factors were named after the major features of the variables that loaded onto the corresponding factor. Factor 1 had two variables: reading website, email, chat-rooms, and text messaging and writing email, chat-room conversations. This factor, named another language e-literacy (AL-e-literacy) had an internal consistency of .89. Factor 2 had seven items loading onto it: these included reading comics, reading newspapers, reading manuals and instructions, reading religious or spiritual writings, reading non-fiction books, and reading letters. This factor, named traditional literacy activities in another language (AL-traditional), had a high internal consistency (alpha=.91). Factor 3 contained seven variables. Items included writing short stories and fiction, work-related writing, reading song lyrics and poetry, writing song lyrics and poetry, reading novels, fiction, and short stories, writing notes, directions, and instruction, and writing letters, journals, and diaries. This factor, named creative literacy

activities in another language (AL-creative) had an internal consistency of .91.

A comparison of the two above EFA analyses (see Table 2) showed that factor structures of after-school literacy activities in English and in another language were similar, albeit not identical. The *e-literacy activities* factor in both analyses had the same items loading onto it. Differences were found in the other two types of literacy activities. Along with the four variables in English literacy activities that loaded onto *creative literacy activities*, three other variables loaded onto *e-literacy activities* for the factor in another language; the three variables included

Table 2
Factor Structure of English at Home and Another Language at Home

	English at Home			Another L	Another Language at Home			
	F1	F2	F3	F1	F2	F3		
Eigenvalues	6.13	1.61	1.27	9.63	1.18	1.12		
Reading websites, email, chat- rooms, and text messaging	.981	.035	.067	.526	.462	148		
Writing email and chat-room conversations	.805	027	045	.679	.275	242		
Reading newspapers	037	.756	.121	.185	.774	.019		
Reading manuals and instructions	048	.749	.081	224	.744	197		
Writing notes*, directions, and instruction	.041	.623	027	194	.353	508		
Reading nonfiction books, e.g., biographies	.006	.598	.016	155	.619	269		
Reading letters	.004	.575	239	.142	.604	266		
Reading religious or spiritual writings	072	.551	086	.002	.681	.094		
Reading magazines	.116	.513	103	.088	.709	132		
Work-related writing	.175	.496	022	.024	033	759		
Reading novels, fiction, and short stories	.102	.407	195	071	.330	544		
Reading comics	.022	.372	119	.091	.830	.042		
Writing song lyrics, poetry	.002	091	901	.346	051	702		
Reading poetry, song lyrics	.046	.034	762	.234	.050	673		
Writing letters, journals, and diaries	.091	.206	536	.157	.414	443		
Writing short stories, fiction	064	.302	501	149	.070	942		

Note. F1 e-literacy; F2 traditional literacy; F3 creative literacy; * "Writing notes" refers to classroom notes, notes for specific purposes in school or at home, not notes written among students.

work-related writing, reading novels, fiction, and short stories, and writing notes, directions, and diaries. Two of these three variables, reading novels, fiction, and short stories and writing notes, directions, and diaries had double loadings onto both traditional literacy activity and creative literacy activities. In addition, there were three other double loadings in the factor structure of Another-language-at-home. These results indicate that although literacy activities in English and in another language share some similar structures, these activities in other languages were loading onto other factors, resulting in somewhat different meanings.

A third set of EFA was performed on students' in-school English literacy activities (Table 3). Three factors explained 41.55% of the total variance. The eigenvalues for these were all above 1 (4.21, 2.67, and 1.64 respectively). The first factor was interpreted as in-school e-literacy-related activities (in-school e-literacy). This factor had three items with an alpha=.89. These items were reading emails, chat/text messaging, writing emails and chat/text messaging, and reading websites. The second factor, in-school traditional literacy activities (in-school traditional literacy), had eight items with an alpha=.75. The items included writing essays, writing reports, reading novels, fiction, and stories, reading textbooks, reading non-fiction books, writing notes, directions, and instructions, reading manuals and instructions, reading manuals and instructions, and reading newspapers/magazines. The third factor, in-school creative literacy-related literacy activities (in-school creative literacy) had four items with an alpha=.64. These were writing song lyrics and poetry, reading poetry and song lyrics, writing letters, journals, and diaries, and writing others. The three factors had relatively low correlations (.26, .29, and .32). Two items, fiction writing and other reading, did not load onto any of the factors and were removed from further analyses.

Table 3
EFA of In-school Literacy Activities

	Factor		
	F1	F2	F3
Eigenvalues	4.21	2.67	1.64
Reading emails, chat/text messaging			
Writing emails chat/text messaging	.845	060	.138
Reading websites	.617	.175	110
Writing essays	006	.773	012
Writing reports	125	.726	.154
Reading novels, fiction, stories	007	.648	030
Reading textbooks	.060	.636	148
Reading non-fiction books	.012	.539	117
Writing notes, directions, instructions	100	.461	.123
Reading manuals, instructions	.074	.351	.226
Reading newspapers/magazines	.144	.301	.065
Writing song lyrics, poetry	.000	126	.808
Reading poetry, song lyrics	.223	083	.674
Writing letters, journals, diaries	.139	.077	.645
Writing others	084	.037	.318
Writing short stories, fiction	.049	.284	.291
Reading others	.103	.075	.135

Note. F1 e-literacy; F2 traditional literacy; F3 creative literacy.

Table 4
Standardized Beta Coefficients for Students' Background on English After-school Literacy Activities

	English e-literacy activities	English traditional literacy activities	English creative literacy activities
Gender		.17	.23
R		.17	.23
R square		.03	.06

Three multiple regression analyses were performed using the in-school English literacy factors, after-school English literacy factors, and the after-school literacy factors on another language as dependent variables and students' background (sex, mother's education level, and home language status) as independent variables. Table 4 presents the standardized beta coefficients for the regression equations predicting students' English after-school literacy factors based on stepwise regression. Only those statistically significant values are reported. We did not find strong student background predictors of students' English after-school literacy factors. As shown in Table 4, only gender weakly predicted two of the three literacy activity factors (β =.17, p<.05 for traditional literacy; β =.23, p<.05 for creative literacy), and it accounted for only 3% and 6% of the variability on these two factors. There were no significant predictors of after-school English e-literacy activities. Nor were there any significant student background predictors for the in-school English literacy factors or the after-school literacy activities in another language.

Students' Background and Their Perceptions and Knowledge of the Test and Test Preparation Practices

Our research examining the association among students' background and their perceptions and knowledge of the test, as well as their test preparation practices, was first investigated with the overall sample (n=534). No significant results were found between students' background and their knowledge of the test. Associations between students' background and the two other dependent variables (perceptions of the test and test preparation practices) were significant, albeit low (see Table 5). Both mother's education level and home language were significantly associated with students' perceptions of the test (β =-.15, p<.05; β =.11, p< .05), although mother's education was a negative predictor. Home language was also significantly associated with students' test preparation practices (β =.15, p<.05).

Subsequently, separate analyses were conducted for the pre- and post-test groups and the L1 and L2 groups. The purpose was to determine if any group differences existed among the relationships investigated. For the pre-test group, only home language significantly predicted students' perceptions of the test (β =.22, p<.05) and test preparation practices (β =.18, p<.05). For the post-test group, sex and mother's education were both predictive of this group of students' perceptions of the test (β =.16, p<.05; β =-.12, p<.05), and home language was predictive of students' test preparation practices (β =.14, p<.05). The results for the L1 group of students failed to identify any significant associations with their perceptions and knowledge of the test or their test preparation practices. For the L2 group, however, mother's education was

Table 5
Standardized Beta Coefficients for Students' Background on
Test Perceptions, Knowledge, and Preparation

		Gender	Mother's education	Home language (L1 vs. L2)
Whole sample	Test perceptions		15	.11
	Test preparation			.15
Pre-test group	Test perceptions			.22
	Test preparation			.18
Post-test group	Test perceptions	.16	12	
	Test preparation			.14
L2 group	Test perceptions		28	

Note. This table only reported the results that had at least one significant result in the group.

significantly associated with this group's perceptions of the test, although it was a negative predictor (β =-.28, p<.05).

Discussion

This study has helped provide a more detailed picture of the L1 and L2 students who write the OSSLT in Ontario. Students' literacy activities do not function as isolated school events, but are integrated throughout their school and after-school/home activities. Students' literacy activities either in English or in another language either after school or in school can generally be grouped into three categories: computer-mediated literacy activities, literacy activities for creative purposes, and literacy activities that are primarily traditional and academically school-focused. Specific literacy activities constituting these categories vary somewhat due to language (English or in another language) or where they occur (in school or after school).

The variability found in after-school literacy activities further echoed McCarthey's (2000) statement that certain variability exists in the type and frequency of literacy events across households. At the same time, it is also evident that the issue of defining literacy is complicated in the first language, but even more so in the second language (Bernhardt, 2003). Our results suggest that the categorization of literacy activities into traditional or creative literacy activities depends on the language in which they are conducted. For example, reading novels, fiction, and short stories in English belonged to traditional literacy activities in English. In contrast, the boundary between traditional literacy and creative literacy activity becomes less distinct for students using another language (see factor double loadings in Table 2). This situation also applies to writing notes, directions, and diaries in English or in another language. Hence the language in which literacy activities are conducted may be important in defining the categories of literacy activities. Certainly these results are tentative, but they do support the suppositions that literacy should be defined in the light of language variety (Snow, 1992) and that literacy activities in one's home language and in English can demonstrate varying structures, values, and expectations (Gay, 1988; Snow, 1992). Similarly, the ways of integrating written language into daily social life vary between social and cultural groups (McCarthey, 2000). McCarthey further maintained that the nature, purpose, and uses of literacy materials also differ among cultural groups.

Our results also suggest that gender is a significant, albeit minor predictor of students' after-school literacy activities. Girls were more inclined to be engaged in traditional and creative literacy activities in English than boys (see Table 4). In contrast, we did not find the students' backgrounds to be associated with their in-school literacy activities. Because literacy activities in school are more consistently expected among all students than after-school literacy activities, this result is not surprising.

Our examination of the second research question found that the L2 students' background characteristics were more predictive of their perceptions of the test than those of L1 students. Interestingly, mother's education levels were negatively associated with students' perceptions of the test (see Table 5), that is, students who reported more positive perceptions toward the test were from families where the level of the mother's education was lower. Fisher (2000) found that students with low socioeconomic status (SES) had significantly higher GPAs than students from high SES backgrounds. He indicated that the SES status might not be as large a factor as it once was. Also, it depends on how SES data are defined and collected, for example, the data may not be a true reflection of parents' educational levels as many new immigrants hold low-income jobs for a number of years before their incomes catch up with those of the rest of the population with similar educational levels. Another noteworthy point is that students' perceptions of the test may not be equivalent to their academic achievement indicators. Lower achievers might have had high perceptions of the test, yet their literacy abilities still limited them in doing well on the OSSLT. Further studies could be carried out to examine the relationship between how students perceive the test and how well they perform on it, as well as their relative association to indictors of family SES. Second, students' background information was a stronger predictor of test perceptions and test preparation practices than their knowledge of the test. Compared with the pre-test group, some of the background variables for the post-test group were more associated with their perceptions of the test and their test preparation practices.

Certainly our sample was from a small sample of schools, limiting the representativeness of the population of OSSLT test-takers. Furthermore, the students who participated in the study were those for whom participation was actively obtained from their parents. The background variables we used are not meant to reflect the entirety of students' background variables, and our future work will continue to explore the relevance of other potentially important student variables. Our findings illustrate the underlying complexity of our ongoing attempts to understand students' literacy practices and their perceptions of literacy testing. We believe that further qualitative investigations are needed from the open-ended items on the questionnaire and follow-up interviews to help provide further conceptions of these literacy and background constructs and alternative examinations of our initial findings. In terms of students' experiences with the OSSLT, the parallel qualitative analysis of the open-ended questions of this study (Doe, Cheng, Fox, Klinger, & Zheng, 2009) may reveal more in-depth differences between the L1 group and L2 group, as well as the pre-test and post-test groups.

Conclusion

Based on the findings of this study, we argue that language (English or another language) adds an important dimension to our understanding of students' literacy activities and how these activities occur. The relationship among students' background and their in- and after-school literacy activities (both in English and in another language), as well as the relationships between students' backgrounds and their perceptions of the OSSLT, highlight the complex nature of

literacy when it is examined across varied languages. This is further evidence that students' perceptions of the OSSLT are affected not only by their cultural identity as measured by language, but also by their background. In this sense, the OSSLT may not only be a simple cross-curriculum literacy test as defined by the EQAO, but also a reflection of the students' backgrounds.

In a search for transformative approaches to literacy curriculum, this kind of research points to the educational implications of bridging home and school literacy. As argued by Cairney (2002), to build effective relationships between home, school, and community, teachers should consider more fully how they meet the needs of all students involved and whether and how they should incorporate the cultural and language diversity into the literacy activities in class. They also need to consider the contribution and the matches and/or mismatches of home and school literacy practices, because home-based reading would increase students' motivation to read and promote parental involvement (Koskinen et al., 2000). Support for literacy in students with diverse backgrounds should not only address English literacy development in school, but should also adopt a social constructivism perspective by enhancing literacy development in students' home languages (Au, 1998). Thus the gap can be narrowed between the literacy achievement of students with other-language backgrounds and that of native speakers.

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Appendix A: Descriptive Statistics of Students' Views of the OSSLT

		М	SD
Perception of the test			
	all sample	7.25	2.25
	taken group	6.39	1.92
	not-taken group	8.49	2.10
	L1 group	7.37	2.29
	L2 group	7.06	2.18
Knowledge of the test			
	all sample	9.76	3.35
	taken group	10.18	3.22
	not-taken group	9.13	3.43
	L1 group	9.88	3.35
	L2 group	9.59	3.35
Test preparation practices			
	all sample	1.21	.50
	taken group	1.27	.48
	not-taken group	1.15	.54
	L1 group	1.22	.52
	L2 group	1.21	.48

Appendix B: OSSLT Student Questionnaire

Section I **Background Information** 1. What is your gender? O Male O Female What is your birth date? Month:_____ Day:_____ Year:____ 2. What are your parent(s)' or guardian(s)' highest levels of education? Parent 1 (or Guardian 1) Please also indicate gender ______ Primary school level Secondary school level O College/University level O If applicable, Parent 2 (or Guardian 2) Please also indicate gender ______ Primary school level O Secondary school level College/University level 0 3. What kinds of work do your parent(s) or Guardian(s) do? Parent 1 (or Guardian 1) _____ or Parent 2 (or Guardian 2) ____ 4. List the courses you are currently taking: Course Name Grade Level 5. If one of your courses above is an ESL course, please circle your ESL level. A B C D 6. Are you currently taking any English Literacy Development courses? o Yes o No

8. What course do you get the highest grade in? ______

10. What language did you **first** speak at home? _____

9. What language do you use most while you are in school? _____

l1.	Do you continue t	o use this <u>first</u> lang	guage? O Yes	O No (Go to Quest	ion 12)
	If <u>yes</u> , where do y	ou use it?			
	• At home with O Always	my family O Sometimes	O Rarely	o Never	
	• In class O Always	O Sometimes	O Rarely	O Never	
	• Outside class O Always	in school O Sometimes	O Rarely	O Never	
	Outside schoolO Always	O Sometimes	O Rarely	o Never	
12.	J	age(s) do you spea	•		
13.	Where were you	born?r =			
14.	If you were bornYears		w old were yoเ	ı when you arrived i	n Canada?
15.	How long have yo	ou lived in Canada? Months			
16.	How many years Years	did you attend scho	ool before you	came to Canada?	
17.	How long did you Years	study English befo Months	re you came to	Canada?	
18.	Where did you liv	ve before you move	d to Canada? _		
ctio	n II Your Lite	racy Activities			

Sec

- 1) In the section under English, indicate how often you read and write the following in **English** outside of school each week by circling the approximate time you spend on each activity.
- 2) If you read and write the following in a language other than English, (e.g. French, Chinese, Arabic) use the second section (2nd language) to **identify the language** and then circle the approximate time you spend on each activity in this second language outside of school.

N	ever	1 hour or less	more hour a than		SS	hours	than 3 but les 5 hours	SS	More t hours b than 10	ut les	S		ours o nore	r
	0	<1 hr	1-3	hrs		3-5	hrs		5-10	hrs		>1	0 hrs	
REA	DING		Engl	ish					2nd	Lang	•			
19.		ction books, lographies	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
20.	Comic		0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
21.		ooms, text	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
22.	Letter		0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
23.	Magaz	rines	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
24.	Manua instru	,	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
25.	Newsp	apers	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
26.		s, fiction, stories	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
27.		, song lyrics	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
28.	Religio spiritu	ous or al writings	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
WRI	TING		Engl	ish					2 nd	Lang.				
29.		, chat-room rsations	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
30.	Letters diaries	s, journals, S	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
31.	Notes, instru	directions,	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
32.		yrics, poetry	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
33.	fiction		0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10
34.	Work- writing	related 3	0	<1	1-3	3-5	5-10	>10	0	<1	1-3	3-5	5-10	>10

- 35. Indicate how often you use a computer **at home** for school work.
 - O I don't have a computer at home.
 - O I never or hardly ever use the computer for school work.
 - O I use the computer once or twice a month for school work.
 - O I use the computer once or twice a week for school work.
 - O I use the computer almost every day for school work.
- 36. How often do you use a dictionary for school work?
 - O I don't have a dictionary.
 - O I never or hardly ever use a dictionary for school work.
 - O I use the dictionary once or twice a month for school work.
 - O I use the dictionary once or twice a week for school work.
 - O I use the dictionary almost every day for school work.

37. How many hours a week on average do you read and write the following $\underline{\textbf{IN}}$ $\underline{\textbf{SCHOOL}}$?

	Time Spent Reading:	1	Time Spe	nt Writing:
	Emails, chat/text messaging: _	hrs	Emails, chat/text me	ssaging: hrs
	Websites:	hrs	Short stories, fiction:	hrs
	Non-fiction books:	hrs	Song lyrics, poetry:	hrs
	Textbooks:	hrs	Essays:	hrs
	Newspapers/magazines:	hrs	Reports:	hrs
	Novels, fiction, stories:	hrs	Notes, directions, ins	structions: hrs
	Manuals, instructions:	hrs	Letter, journals, diar	ies: hrs
	Poetry, song lyrics:	hrs	Other (please explain	n): hrs
	Other (please explain):	hrs		
•	Your Perception of the Test			
	38. How important is the OSSLT O Not important O Son		ortant O Important	O Very important
	39. Do you expect the reading a activities you do in school? O No, not at all O Son	nctivities on t newhat simila		o Yes, exactly.
	40. Do you expect the writing a activities you do in school? O No, not at all O Som	ctivities on tl newhat simila		o Yes, exactly.
	41. Do you expect that you will p	pass the OSS	SLT?	
	Please explain			
•	Your Test Preparation Practices			
	42. What are you doing to prepa O My ESL teachers are pr O My other teachers are p O I am preparing by myso O I am taking a tutorial/o	eparing me to reparing me	to take the OSSLT) all that apply.

,	How long are you spending on test preparation for the OSSLT? With ESL teachers O 2 weeks or less O 3 to 4 weeks O 5 to 6 weeks O More than 6 weeks With other teachers O 2 weeks or less O 3 to 4 weeks O 5 to 6 weeks O More than 6 weeks Sy myself O 2 weeks or less O 3 to 4 weeks O 5 to 6 weeks O More than 6 weeks Where the man for the OSSLT?
44.	What materials are you using for test preparation (e.g., sample tests, worksheets, writing assignments, or computer programs etc)?
You	r Knowledge of the Test
45.	Do you think the way you read on the OSSLT will be the same as the way you read in your classes? O Yes O No Please explain
46.	Do you think the way you write on the OSSLT will be the same as the way you write in your classes? O Yes O No Please explain
47.	Do you know what tasks you will be expected to do on the reading section of the OSSLT?
	O No, I do not O Somewhat O Mostly O Yes, I do How much do you know about the reading section of the OSSLT? O No knowledge O Some knowledge O Knowledgeable O Very knowledgeable Do you know what tasks you will be expected to do on the writing section of the
77.	OSSLT? O No, I do not O Somewhat O Mostly O Yes, I do
	How much do you know about the writing section of the OSSLT? O No knowledge O Some knowledge O Knowledgeable O Very knowledgeable
	Do you think that you will have enough time to finish the OSSLT? O Yes O No How do you describe your feelings about taking the OSSLT this year (e.g., nervous, unconcerned)?