

Creating a Locally-Developed and Locally-Normed English Reading Assessment for Secondary-Level ESL Students

Lee Gunderson
University of British Columbia
Lee.gunderson@ubc.ca

According to Statistics Canada, by 2031, one in four Canadians will have been born in another country. One consequence is that the number of students who speak a language other than English at home (ESL) will continue to increase. One of the foundations of good instruction is having valid and reliable assessment measures. In 2008 representatives of 12 school districts established the British Columbia ESL Assessment Consortium. Consortium activities include the development of assessment instruments, cross-district cooperation in the development of ESL support levels, and the implementation of assessment research (see www.eslassess.ca). Members created the Lower Mainland English Reading Assessment (LOMERA) for secondary students (grades 8 to 12) that includes writing used in the approved curriculum. LOMERA will be described and the results of a norming study of 4,800 students will be presented that reveals its validity and reliability. The session will also include descriptions of three alternate forms of LOMERA, a web-based version, and the development of a web-based intermediate-level assessment. These assessments are being used in British Columbia to establish instructional levels for ESL students. They have the advantage of being locally developed and normed on ESL students. "What Next for the Future of English Language Teaching?" Consortium members believe one answer is "locally developed large-scale valid and reliable assessment measures."

THE PROBLEM

Gunderson (2007) notes, "Every year millions of human beings – the rich, the destitute, entrepreneurs, refugees, the young, the old, laborers, scientists, law-abiders, criminals – freely or under duress, driven by political, familial, economic or social motives, uproot themselves and by first-class, coach, steerage, on foot or by stealth, cross the political boundaries that mark the margins of the greener pastures they earnestly seek, only to face the revelation that the cultural, linguistic, economic, and social borders of the pastures themselves are often more difficult to cross than the invisible geographic and political boundaries protected by the armed guards and police dogs they met on their first day as immigrants" (p. 5).. Hundreds of thousands of school-age immigrant students enter schools in which they must learn English and academic content in English and in many cases they fail at both tasks (Gunderson, 2009; Gunderson, Odo, & D'Silva, 2011b). Educators, on the other hand, are faced with the difficult task of designing instruction that accounts for the vastly different skills, abilities, and backgrounds of their ESL(ELL) students (Gunderson, 2009) . It is widely accepted that reliable and valid assessment methods and procedures are vital to thoughtful instruction (Gunderson, Odo, & D'Silva, 2011a). The problem, however, is that there is a significant lack of appropriate ESL(ELL) assessment measures.

BACKGROUND

Instruction in mainstream classrooms is broadly based on the notion that students who are within a particular age group, such as grade 3, are generally at the same level or stage of English language development, although there is considerable diversity in many classes. Teachers design instruction and select materials that represent their students' grade levels. The inclusion of ESL (ELL) students represents a more complex problem because their English and

their cultural and learning backgrounds vary in many different ways, even in individuals who are the same chronological age (Gunderson, 2008, 2009; Gunderson, et al., 2011a). In mainstream classrooms teachers find students who are non-English speakers who have never attended school and those who have attended school and who have English abilities varying from very limited to nearly fluent. Valid and reliable assessment is essential to appropriate instructional planning.

TERMINOLOGY

A number of different terms is used to describe students who come from homes in which English is not the first language. For years ESL has been a standard. However, some students do not learn English as a second language, but as a third, fourth, or fifth (Gunderson, et al., 2011b). In some jurisdictions the term English Language Learner (ELL) has been adopted as an alternative. The difficulty is that it is a broader term that includes those who have English as a first language (Gunderson, 2007, 2008, 2009; Gunderson, et al., 2011b). ESL(ELL) is different from English as a Foreign Language (EFL). While Teaching English to Speakers of Other Language (TESOL) might be a more appropriate term, the acronym ESL will be used in this paper because of its history.

INCREASING LANGUAGE DIVERSITY

By 2031 one in four Canadians will have been born in another country (Canada, 2010); a trend associated with an increasing ethnic and cultural diversity in schools (Goldenberg, 2006). The number of immigrants who arrive in the Greater Vancouver, British Columbia, region continues to increase (Gunderson, 2007). Indeed, many schools in the region have majority ESL populations. In 2008 this author helped to establish an ESL Assessment Consortium to begin to address the needs of ESL students in Greater Vancouver schools. Representative from the 12 local school districts met and formed the BC Lower Mainland ESL Assessment Consortium (see www.eslassess.ca).

THE ESL ASSESSMENT CONSORTIUM

As noted on the Consortium website:

The Consortium was established by members of the British Columbia Lower Mainland School Boards. Its purpose is to consider various issues related to the assessment of students who come from homes where the language spoken is not English. Consortium activities include the development of assessment instruments, cross-district cooperation in the development of ESL support levels, and the implementation of assessment research. (www.eslassess.ca)

The first task undertaken by members of the Consortium involved reviewing the practices, measures, and policies followed by personnel in each district.¹ The purpose was to discover

¹ Mark Angerilli, ESL Assessment Helping Teacher, School District 36 (Surrey), Karen Beatty, District Teacher – ESL School District 35 (Langley), Reginald D'Silva, University of British Columbia, Lee Gunderson, University of British Columbia, Sylvia Helmer, Visiting Adjunct Professor, UBC/VSB Catherine Humphries, Program Consultant-English Language Learners, School District 41 (Burnaby), Betty Kosel, ESL Consultant (Retired), SD 39 (Vancouver), Raffy LaRizza-Evans, District ESL Support Teacher, SD 37 (Delta), Daphne McMillan, District ESL Resource Teacher, School District 40 (New Westminster),

how ESL students were assessed, what instruments were used to assess students, what were the outcomes of assessment, how were assessment results interpreted and used, and what, if any, policies and procedures were followed. The Consortium has operated mostly on the power of volunteerism, although it has received limited funding to support its research activities.²

STUDENTS ASSESSED AND ASSESSMENT MEASURES

It was reported that ESL students, including new immigrants, from kindergarten to grade 12 were administered some kind of English assessment. Three school districts did not assess ESL students enrolled in kindergarten to grade 3 (primary-level classes). Assessments varied by grade level and from a single assessment to a battery of assessments. The most widely used assessment was the Idea Proficiency Test (IPT) (Ballard, Dalton, & Tighe, 2001). The IPT measures oral, reading, and writing proficiency to determine “Non-, Limited, or Fluent/Competent designations.” None of the members reported using these designations. However, they reported that IPT scores were used to determine ESL support levels ranging from 1 to 4 or from 1 to 5. No conversion protocols were reported. Instead, ESL levels were determined based on examiners’ experience.

The Brigance (1983) was in use in three districts. Other measures used were the Bilingual Syntax Measure (Burt, Dulay, & Hernández, 1973), the Woodcock Reading Mastery Test (Woodcock, Various), the Woodcock-Munoz (Woodcock & Munoz-Sandoval, 1993), the Comprehensive English Language Test (CELT) (Harris & Palmer, 1986), various informal reading inventories such as the Waddington Diagnostic Reading Inventory (Waddington, 2000), the Peabody Picture Vocabulary Test (PBVT) (Dunn & Dunn, 1997), the Secondary Level English Proficiency Test (SLEP) (ETS, 2006), the Gap (McLeod & R. McLeod, 1990), and a wide variety of locally-developed measures. Overall, 40 different measures were identified that were used to assess ESL students.

ASSESSMENT OUTCOMES

Gunderson, Murphy Odo & D’Silva (2011a) conclude that, “Language teachers have for some time opted to assess their students to ascertain their ‘level’ of English language proficiency” (p. 344). The difficulty, of course, is that proficiency levels do not actually exist because they have been developed by teachers and researchers. A well-known levels approach was developed by the American Council for the Teaching of Foreign Languages (ACTFL), which had three levels, each subdivided into three sub-levels (ACTFL, 1983). So, there are three levels of beginner and so on. This author has seen this approach used in various programs designed for adult ESL students in British Columbia.

Members of the Consortium reported that they interpreted the results of the various measures they used to develop an “instructional” or “scaffolding” level for students. One reported using 3 levels, while 5 reported 4 and 4 reported 5 levels. There was discussion and friendly disagreement on the meaning, validity, and usefulness of the different levels

Dennis Murphy Odo, Georgia State University, George Monkman, ESL Coordinator, School District 44 (North Vancouver), Donna Neilson, District ESL Resource Teacher, SD 45 (West Vancouver), Dale Shea, ESL Coordinator, School District 43 (Coquitlam), Diane Tijman, ESL & Multiculturalism Coordinator, School District 38 (Richmond), Julie Wright, ESL Helping Teacher, School District 34 (Abbotsford)

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approaches. As mentioned previously, protocols for converting assessment scores to instructional levels were never explicit.

THE LOWER MAINLAND ENGLISH READING ASSESSMENT (LOMERA)

It became clear that there were a number of urgent issues. Members concluded that there was a significant need for a uniform assessment among and within districts. One feature that was especially disturbing was the mobility displayed by ESL students across school districts (Gunderson, D'Silva, & Odo, In press). These authors found that many ESL students transferred to many different school districts by the time they graduated. This feature prompted members to explore the use of a single assessment so that re-testing would not have to occur with every transfer.

Discussion focused on the nature of the assessment and whether it should involve listening, speaking, reading, or writing, or a combination of more than one kind of measure. It was decided that the decision should follow the decision on what the target population of the assessment should be. There was consensus that secondary students (grades 8 to 12 in B.C.) would be the focus of the assessment because they were clearly at risk because of age and having to leave school at 19. In addition, it was concluded that secondary teachers were generally the least prepared to address the needs of ESL students, so good assessment results were particularly important.

Important principles were formulated, including that the assessment should be easy to administer, easy to score, related to the secondary curriculum in some way, a group-administered measure, and be easy to interpret. Speaking and listening assessments were dismissed as alternatives because they required one-on-one, teacher-student sessions. Writing was seriously considered because such a measure would involve skills that are essential to secondary students' academic success.

Members argued that writing was a very valuable skill in secondary schools, one that was important to assess. Others argued that the difficulty with writing was scoring. Some suggested a matrix for scoring, while others suggested the difficulty was developing appropriate writing prompts. It was noted that is particularly difficult to develop prompts appropriate for new immigrant students. After discussion, it was concluded that issues related to a writing assessment made it difficult and complex for secondary teachers.

The notion of a reading test was proposed. In addition, it was suggested that a reading test could be developed that involved curriculum materials approved for use in secondary schools in British Columbia. One member suggested an objective choice test. In this case students could read curriculum materials and then choose the correct answer from a list of four or five possible choices. Another suggestion was that the measure could be developed as a cloze exercise in which students are asked to fill in the correct word. Scoring of such a measure could follow standard cloze assessment standards. It was suggested that alternative would be a maze procedure in which students are given a multiple-choice approach to a cloze passage.

Taylor (1953) developed the idea of a "cloze procedure" that he argued was a good measure of readability. It has been shown to be a useful device for matching both L1 and L2 students with text. The cloze procedure utilizes systematically deleted words which students are asked to supply (Bormuth, 1967; Klare, Sinaiko, & Stolurow, 1971; Potter, 1968). The cloze test has been used in numerous studies of ESL students (Carroll, Carton, & Wilds, 1959; Darnell, 1968). Knowledge of the syntactic and semantic systems of English allows them to supply correct words for the deletions.

The maze procedure (multiple-choice cloze) provides students with choices (Guthrie, Seifert, Burnham, & Caplan, 1974). Words are deleted and 3 or 4 choices are provided for the reader. Maze is simple to administer and simple to score. Its advantages over other assessment

procedures were considered noteworthy. It was decided that a maze-assessment was the best one to develop for the proposed secondary instrument.

CURRICULUM MATERIALS

Teachers have a wide choice of academic materials in British Columbia. They can use texts and other materials on “approved lists.” It was decided that samples of text from textbooks would serve as assessment passages. Members independently perused approved materials and selected short cohesive passages. All samples were measured for reading level using a battery of readability formulas such as Fry and Spache. Readability formulas often differ in their estimations of grade level even for the same passage (Gunderson, 2009). At a Consortium meeting members met in independent groups and reviewed the passages and the readability estimations. It was concluded that the assessment would be comprised of 8 passages with 12 deletions each for a total possible score of 96. It was also concluded that the assessment should have a wide range of grade levels. This decision resulted in a problem because the curriculum samples did not have lower reading levels, so a number of passages were written specifically for the assessment at the lower levels. Readability estimations were a result of averaging results from different formulas and members’ estimations.

Passage 1 – Trip to the Store – Grade 2

Passage 2 – A Closer Look at Living Things - Grade 4

Passage 3– Resources we use – Grade 5

Passage 4 – Shelters in America – Grade 6/7

Passage 5 - How the Hamburger Got its Name – Grade 8

Passage 6 – Living Things and their Environment – Grade 9

Passage 7 – William Stephenson – Grade 10

Passage 8 - How Did Scientists Discover that Genes Are Made of DNA? – Grade 11/12

The Assessment time was set at 35 minutes.

The following is an example taken from the LOMERA’s front page information section.

The exercise you are about to do is not a test. There is no pass or fail and the results have no affect on your grades. Please read the following sentences. Notice there is a missing word.

The old man walked into the forest. He saw many different animals. His favorite animal was ___1___ big blue bird sitting on its nest.

Your task is to pick the word that best fits the sentence.

1)

a. that c. the

b. his d. its

The correct answer is "the" so the letter "c" has been circled or the bubble next to "C" on your answer (scantron) sheet has been filled in. (Gunderson, D'Silva, & Odo, 2010, p. 4)

LEVELS DESIGNATIONS

Members agreed to disagree on the “levels” issues. It was decided that two different levels designations would be developed; the 4- and 5-level designations. It was also determined that the assessment should be normed using both English speakers and ESL speakers in grade 8 to 12.

Each district downloaded the assessment from the Consortium website and produced individual test booklets with their own District-level logos and other related information. Some

opted to create a separate answer sheet, while others asked students to fill in their answers on Scantron sheets that are checked electronically.

THE LOMERA NORMING STUDY

Consortium members served as study coordinators. Their tasks included keeping the LOMERA tests secure and their contents confidential and coordinating the testing sessions with the volunteer teachers. They also collected and scored the assessments. Tests were administered between mid-October and November to 4,813 grade 8 to 12 students in 10 different school districts. In addition, district levels data were also recorded in each case and these were coded and provided to L. Gunderson who entered the data into files for analyses by SPSS.

Means and standard deviations were computed by grade by level for English speakers and ESL students in four- and five-level districts. In addition percentile scores were computed. Statistics revealed that the assessment had both validity and reliability. Overall means for total score by grade are shown in Table 1. Norms were computed and levels bands were produced (see Tables 2 and 3).

Table 1

Report

total

Grade	Mean	N	Std. Deviation
8	63.6120	634	19.42168
9	67.9522	948	17.74123
10	68.2234	1170	18.32514
11	69.7716	1274	17.78647
12	72.7624	787	18.61039
Total	68.7259	4813	18.44182

Table 2. ESL Levels by Grade in 4-level Districts, n= 1,515

ESL Level	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
1	0-47	0-47	0-48	0-46	0-43
2	48-62	44-61	49-63	47-60	44-61
3	63- 70	62-73	64-74	61-75	62-75
4	71-96	74-96	75-96	76-96	76-96

Table 3. ESL Levels by Grade in 5-level Districts, n=1,850

ESL Level	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
1	0-47	0-48	0-40	0-39	0-38
2	48-60	49-58	41-65	40-58	39-58
3	61-71	59-70	66-74	59-74	59-73
4	72-79	71-78	75-80	75-80	74-80
5	80-96	79-96	81-96	81-96	81-96

Between passage correlations were high. An inspection of passage means revealed that passage 2 (A Closer Look at Living Things - Grade 4) was significantly lower than passage 3 (Resources We Use – Grade 5) and passage 6 (Living Things and their Environment – Grade 9) was lower than passage 7 (William Stephenson–Grade 10) even though the readability formulas had determined the opposite. Their order was changed in the final version of the assessment.

THE ONLINE LOMERA

In 2010 it was decided that an internet-based version of LOMERA should be developed. A programmer was hired and the prototype online version was developed. A number of features were included in the online version. Student numbers, school, grade, and other information were input by an administrator. Students were informed of their number a general password. After a student signed onto the assessment page and entered student number and password, the first example page shown above was shown. When the student had completed the example page, the start button brought up the first page.

A clock was included that revealed how much time the student had left to complete the test. It started at 35 minutes and counted down to zero. Care was taken to assure that an entire LOMERA page, including both the passage and the maze items, appeared on the screen. Buttons were included that allowed students to navigate forward or backward in the assessment. The final page included a “Done” button if a student completed the assessment before the allotted time limit was over.

The assessment was extensively tested in one of the districts. The piloting activities were coordinated by C. Humphries in the Burnaby School District. The pilot assessment trials took place in three secondary schools in their computer laboratories.

Pilot Results

Several important omissions were observed in the online assessment. No administration date was included, so it was added. Browser and machine differences often caused difficulties for students to see full pages. Mac machines also had browsing problems. The programmer upgraded the programming and these problems were taken care of. In cases where there were difficulties, the students could press a button and the full-page screen feature was activated.

In computer laboratories where monitors and keyboards were located close to each other, security was a problem. Large tag board sheets were borrowed from art supplies and they made good security separators between monitors. A more general problem was related to scheduling. Computers laboratories in the three secondary schools were extremely busy and so it was difficult to find open times to administer the LOMERA. Another general difficulty was that many computers and monitors were quite dated and had various mechanical problems like poorly operating equipment. In one school the band width appeared to be a problem resulting in very slow reaction times in the program.

The inputting of student identification numbers and other information was laborious. An update was added that allowed data to be input into the system from school records via an excel file. The input fields were made uniform across all of the districts.

Results of the pilot study were encouraging. Teachers and administrators were impressed that they could receive individual results within seconds after a learner had completed the assessment. Results included mean score, ESL Support Level, an item-analysis of correct/incorrect responses, and a printable summary sheet. An operating manual for the online assessment was developed by two Consortium members (D’Silva & Odo, 2011).

ONLINE VS. PAPER-AND-PENCIL COMPARABILITY

One concern about the online assessment was whether or not scores would be comparable to paper-and-pencil scores. Would a student who took the assessment online get the same score

as she would if she took the test in a printed form? Murphy Odo (in press) conducted a study in which 120 secondary-level ESL students were randomly assigned to two groups; one took the online assessment first and a month later took the paper-and-pencil test, while the other group took the assessments in the opposite order. Findings revealed that there were not statistically significant differences in scores between the two administration modes. The overall correlation between total scores was .96. Reliability scores involving Chronbach's alpha was .05 for 96 items on the paper version and .95 for 96 items on the online version. Results of Murphy Odo's investigation was that the LOMERA online vs. paper version were comparable. This study supported the use of the online version as an alternative to the paper-and-pencil version.

ALTERNATE ASSESSMENT FORMS

Consortium members had serious concern for the security of LOMERA. In addition, they wished to be able to assess student achievement over time. It was concluded that there was an urgent need for alternate assessment forms. Curriculum materials were reviewed and samples collected. These were used to construct a number of alternate forms which were normed. In addition, it was concluded that an assessment for elementary students (grade 4 to 7) should be developed. Elementary-level curriculum materials were reviewed and passages were selected after they had been assessed for readability levels. A norming study involving two new elementary forms has been planned to be conducted in Fall 2012. This assessment has been named the Lower Mainland Elementary English Reading Assessment (LOMEERA).

CONSORTIUM OPERATIONAL PRINCIPLES

The Consortium was established and exists as a collaborative of interested ESL professionals. It is neither associated nor affiliated with any particular group, association, or organization, although its members represent 12 school districts and a university. It receives no direct funding from any group, association, or organization, although its research has been partly supported by a funding group associated with the BC TEAL Organization and the Andrews Award in the Faculty of Education at the University of British Columbia. Direct funding of Consortium activities comes from personal sources. The Consortium maintains an online Wiki (www.assessconsortium.pbworks.com) that archives all meeting minutes and other associated business. In addition, it has a web page (www.eslassess.ca), that contains listings of the membership, and downloadable review of the literature related to ESL Assessment, and a pass-word protected page that contains copies of LOMERA assessment materials. All of these Consortium features have been supported by personal funds.

Indirect funding has included the provision of meeting space in various school districts at no cost to the Consortium. Teachers and school district personnel have contributed hundreds of hours of their time to the various projects without additional financial gain. The three university representatives visited school to help establish online capabilities, entered data, analyzed results and produce operating manuals. An assessment listserv was established and operated at the University of British Columbia as part of this author's basic university support.

CONCLUSION

Valid and reliable assessment is the foundation of good instruction. The population of students who speak a language other than English at home represent the case in which valid and reliable assessment are especially critical in designing appropriate instructional programs since they vary in so many dimensions. There are many associated difficulties, however. There are a limited number of assessments that are appropriate for ESL students. They are few measures that have been normed on ESL students. There are many first languages represented in school districts. In Vancouver, for instance there are approximately 158 different first languages (Gunderson, 2007).

The Lower Mainland region of British Columbia has 12 public school districts that enroll approximately 250,000 students in grades K to 12. The ESL Assessment Consortium was organized by representatives from these school districts and from the University of British Columbia. Its first task was to review the methods, measures, and approaches used in the different districts to assess ESL students; approximately 40 measures were described that were in use. It was decided that the Consortium would develop an ESL reading assessment for secondary-level students and normed it for both ESL and English speakers. It was also decided that for reasons of efficiency and ease of administration and scoring that a maze approach would be used to measure English reading ability and to estimate ESL instructional support levels; either 4 or 5-levels.

The Lower Mainland English Reading Assessment, comprised of 8 readability-controlled passages with 12 deletions each for a total score of 96, was normed on 4,813 ESL and English speakers in grades 8 to 12. It is administered to secondary ESL students in all 12 of the participating Consortium school districts. Four alternate forms of the LOMERA have been developed. In addition, an online version of LOMERA has been developed and piloted in one school district. It is currently in use in two school districts. A major difficulty with the online version is the availability of computer facilities since secondary school laboratories are usually fully booked. School personnel are extremely pleased with the performance and instant results available from the online LOMERA.

Consortium members have developed 2 forms of an elementary English reading assessment (LOMEERA) to be normed in the Fall of 2012. These forms have also been made available as an online examination with all of the features mentioned above for the secondary version.

ORGANIZING AN ASSESSMENT CONSORTIUM

The Lower Mainland ESL Assessment Consortium has been an active and extremely successful coalition of educators dedicated to issues related to the teaching and learning of ESL students. The Consortium has been successful because its membership is knowledgeable about issues related to ESL. Their professional responsibilities include district-wide consulting, assessment, and advising so their knowledge about district issues is both deep and wide. The 3 members from the University of British Columbia have expertise in online technology, ESL assessment, and research methodology. Their expertise helped them to guide the Consortium's research and online endeavors. There are a number of operating principles that have served the Consortium well.

1. Collaboration of ESL professionals from schools (grades kindergarten to 12) and members from a research-based university
2. Individual members had professional assignments that were flexible in terms of time and ability to represent cross-district responsibilities
3. District-based members had cross-district responsibilities and influence.
4. University-based members had ESL, reading, and assessment research experience.
5. The Consortium is not identified with or tied to a particular district or organization.
6. Assessment measures are only available to Consortium members.
7. Assessment materials were developed, normed, and produced by Consortium members for students in their own districts.

Members of the Consortium have developed measures that are being used presently in British Columbia to estimate instructional levels for ESL students. They have the advantage of being locally developed and normed on ESL students. "What Next for the Future of English

Language Teaching?” Consortium members believe one answer is “locally developed large-scale valid and reliable assessment measures.”

REFERENCES

- ACTFL. (1983). *ACTF proficiency guidelines*. Hastings-on-Hudson, NY: American Council for the Teaching of Foreign Languages Center.
- Ballard, W., Dalton, E., & Tighe, P. (2001). *IPT 1 oral grades K-6, technical manual*. Brea, CA: Ballard & Tighe.
- Bormuth, J. (1967). Comparable cloze and multiple choice comprehension test scores. *Journal of Reading, 10*, 291-299.
- Brigance, A. H. (1983). *Brigance comprehensive inventory of basic skills II (CIBS II)*. North Billerica, MA: Curriculum Associates.
- Burt, M. K., Dulay, H. C., & Hernández, E. (1973). *Bilingual syntax measure*. NY: Harcourt Brace Javonovich.
- Canada, S. (2010). The Daily Statistics Canada. Retrieved July 5, 2012, from <http://www12.statcan.ca/census-recensement/2006/as-sa/97-557/p4-eng.cfm>
- Carroll, J., Carton, A., & Wilds, C. (1959). *An investigation of 'cloze' items in the measurement of achievement in foreign languages*. Cambridge, MA: Harvard University Laboratory for Research in Instruction, [ED 021513].
- D'Silva, R., & Odo, D. M. (2011). *Online LOMERA video instructional manual for teachers and school district administrators*. Vancouver: ESL Assessment Consortium.
- Darnell, D. (1968). *The development of an English language proficiency test of foreign students using a Clozentropy procedure*. Boulder, CO: University of Colorado.
- Dunn, L. M., & Dunn, D. M. (1997). *Peabody picture vocabulary test*. San Antonio, TX: Pearson.
- ETS. (2006). *Secondary level English proficiency test*. Princeton, NJ: Educational Testing Service.
- Goldenberg, C. (2006). Improving achievement for English-learners: What the research tells us. *Education Week, 25*, 34-36.
- Gunderson, L. (2007). *English-only instruction and immigrant students in secondary school: A critical examination*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gunderson, L. (2008). Commentary: State of the art of secondary ESL teaching and learning. *Journal of adolescent and adult literacy, 52*(3), 184-188.
- Gunderson, L. (2009). *ESL (ELL) literacy instruction: A guidebook to theory and practice*. NY: Routledge.
- Gunderson, L., D'Silva, R., & Odo, D. M. (2010). *Manual: The Lower Mainland English Reading Assessment (LOMERA)*. Vancouver, BC: Lower Mainland ESL Assessment Consortium.
- Gunderson, L., D'Silva, R., & Odo, D. M. (In press). Immigrant students navigating Canadian schools: A longitudinal view. *TESL Canada Journal*.
- Gunderson, L., Odo, D. M., & D'Silva, R. (2011a). Assessing the second language learner (ELL). In D. Lapp & D. Fisher (Eds.), *Handbook of research on teaching the English language arts* (pp. 336-349). New York: Routledge.
- Gunderson, L., Odo, D. M., & D'Silva, R. (2011b). Second language literacy. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (2nd ed., pp. 472-487). New York: Routledge.

- Guthrie, J., Seifert, M., Burnham, M., & Caplan, R. (1974). The maze technique to monitor reading comprehension. *The Reading Teacher*, 28(2), 161-168.
- Harris, D. P., & Palmer, L. (1986). *CELT examiner's instructions and technical manual*. New York: McGraw-Hill.
- Klare, G. R., Sinaiko, S. W., & Stolurow, L. M. (1971). *The cloze procedure: A convenient readability test for training materials and translations*. Arlington, VA: Institute of defense analyses, log No. 4070-11774.
- McLeod, J., & R. McLeod. (1990). *The GAP*. Novata, CA: Academic Therapy Publication.
- Odo, D. M. (in press). An Investigation of the cross-mode comparability of a paper and computer- based multiple-choice cloze reading assessment for ESL learners. *CALL: Electronic Journal*.
- Potter, T. C. (1968). *Taxonomy of cloze research, part one: Readability and reading comprehension*. Inglewood, CA: Southwest Regional Laboratory for Educational Research and Development.
- Taylor, W. L. (1953). Cloze procedure: A new tool for measuring readability. *Journalism Quarterly*, 30, 415-433.
- Waddington, N. J. (2000). *Diagnostic reading and spelling tests 1 & 2: A book of tests and diagnostic procedures for classroom teachers*. Strathalbyn, South Australia: Waddington Educational Resources.
- Woodcock, R. (Various). *The Woodcock Reading Mastery Test*. New York: Pearson.
- Woodcock, R., & Munoz-Sandoval, A. (1993). *Woodcock-Munoz language survey*. Itasca, IL: Riverside.