With this issue we are pleased to bring you the refereed proceedings of the eighth Annual Research Symposium, part of the 33rd Annual TESL Ontario Conference held in Toronto in November, 2007. The themes that were the focus of the symposium were:

- Vocabulary
- Literacy
- Native English-speaking Teachers – Non-native English-speaking Teachers (NEST-NNEST)
- Content-based Language Teaching

The four themes covered topical issues that affect the classrooms and practice of ESL professionals in varied ways. Teachers who encounter problems and challenges related to these themes on a daily basis in their classrooms look for background information and practical ideas that will help them meet their learners’ needs and the needs of their own professional development. In organizing the Research Symposium around topical themes and publishing the proceedings, TESL Ontario offers ESL professionals relevant information on recent research and developments that informs classroom practice and the development of the profession.

As in previous years, the different presentations in this special issue have been grouped around themes selected in consultation with our membership and in conjunction with the Ontario Regional Advisory Committee (ORLAC). They represent a focus on pedagogical challenges that classroom teachers and administrators deal with on an ongoing basis in trying to provide learners with optimal learning conditions. We are confident that readers will find the selected papers interesting and relevant to their teaching. We hope that they will feel inspired by the ideas presented and launch their own inquiries into an aspect of their teaching, then report their insights at future TESL Ontario conferences.

On behalf of TESL Ontario, we thank the Ministry of Citizenship and Immigration (Canada) and the Ministry of Culture and Immigration (Ontario) for supporting the research symposium and the publication of this special issue. Their commitment to this important event for ESL professionals has been a source of encouragement and strength for our association and members. We look forward to continued cooperation and support from the different ministries involved in language, immigration, settlement and training issues. We also wish to thank all the presenters who participated in the different themes of the symposium for sharing their expertise. Without them, we could not have organized the symposium and offered you these proceedings.

Last but not least, we express our sincere thanks to the members of the Reading Committee, the Symposium Moderators and Monitors, the Conference Chair Cheryl Richman, the Contact Editor, Clayton Graves and TESL Ontario administrative and office staff for supporting us in organizing and preparing the publication of this refereed Research Symposium issue of Contact. Without their support, our work would have been more difficult and considerably less pleasant. 

Hedy McGarrell, 
Robert Courchêne 
Co-editors
This special refereed issue of Contact reflects presentations from the Research Symposium organized for TESL Ontario, November 2007. The Symposium brought together experts from across Canada who shared their research findings on a number of themes and, where appropriate, pointed out potential implications for classroom teaching and learning at all levels. All four themes of the 2007 Research Symposium are addressed in these proceedings:

- Vocabulary
- Literacy
- Native English-speaking Teachers – Non-native English-speaking Teachers (NEST-NNEST)
- Content-based Language Teaching

The papers included in the special issue of Contact examine a range of complex and often interrelated issues which are explored through different methodologies.

Theme 1: Vocabulary

Two papers from the Vocabulary theme are included in these proceedings. The first paper, Teaching and Assessing Academic Vocabulary Based on the Academic Word List, describes an academic vocabulary development course designed by Sandra Burger and Jeanette Gallina. The course includes the process of developing a test capable of measuring students’ acquisition of words taught during the course. Burger and Gallina’s exploration of various testing techniques led them to select a matching test and a completion test for use in their study. The pilot test results suggest that the matching test is not suitable for measuring depth of vocabulary knowledge. However, the reported test results for the completion test, although not significant, lead Burger and Gallina to the conclusion that the tasks involved in the completion test would likely be a more suitable test format for their teaching context.

The second paper in the Vocabulary theme, Exploring the Lexical Depth in (Continued on page 3)
a Second Language: Implications for ESL Teaching, also focuses on word knowledge. Parto Pajoohesh reports on her study of immigrant children and the lexical depth, as opposed to breadth, of their vocabulary knowledge. Pajoohesh compared the implicit and expressed deep level word knowledge in three groups of participants: children whose school and home language was Farsi, children whose school and home language was English and children whose school language was English, while their home language was Farsi/English mixed. Among her findings was that children whose school language was English and home languages were both Farsi and English performed as well as their monolingual peers on the English measures. Pajoohesh concludes her paper by drawing implications from her study for teaching vocabulary.

Theme 2: Literacy

Of the four Symposium presentations on the Literacy topic, two are included in these proceedings. The first, Teaching and Transitioning Low Literacy Immigrant Youth by Lynn Collins, Diane Hardy and Monica Leong, describes a literacy program designed for adolescent ESL youth. More specifically, the program is intended to help high school leavers who are ESL learners in need of focussed literacy instruction to meet the needs of additional educational and career opportunities.

Luigi Iannacci, in his paper, Culturally and Linguistically Diverse (CLD) Young Children Learning ESL in Early Childhood Education: Literacy Opportunities and Identity Options, reports on a one-year ethnography of two kindergarten and two grade one classrooms. The focus of the observations was on identifying gaps in the provision of appropriate education for CLD children. Iannacci explores the relationship between literacy and identity through narratives from data collected during field work. The data serve to illustrate the ways in which students in the classrooms were positioned as a result of literacy curricula they encountered. Pedagogical implications are drawn from the analysis and a frame is offered to help conceptualize literacy instruction that is responsive to CLD students’ cultural and linguistic needs and assets.

Theme 3: Native English-speaking Teachers — Non-native English-speaking Teachers (NEST-NNEST)

The role of mentoring for native and non-native English-speaking teachers and how such collaboration can contribute positively to ESL teacher education is the focus of Luciana de Oliveira’s paper, The Importance of Mentoring and Collaboration for the Preparation of Native and Non-native English-Speaking Teachers. While mentoring and collaboration have been widely used in various professions, according to de Oliveira few accounts of formal relationships of this type have been discussed in the literature. The paper offers basic definitions for mentoring and collaboration and stresses the need for two-way partnerships that allow both mentor and ‘mentee’ to make positive contributions. De Oliveira adds that differences in linguistic, cultural and educational backgrounds need to be considered when establishing collaborative and mentoring relationships. The article concludes with suggestions on how mentoring and collaboration might be incorporated into ESL teacher education programs.

Theme 4: Content-based Language Teaching

In their paper, Evaluating the Effectiveness of Content-based Language Teaching, Alyse Weinberg, Sandra Burger and Amelia Hope describe the historical and theoretical background of con-
tent-based language teaching at the University of Ottawa to set the scene for a description of the current French immersion program. Their paper focuses on the results of a survey questionnaire distributed to all students in the two levels of the program. The survey explored student perceptions of subsequent (L2) language teaching, activities for L2 learning, course content and pedagogical activities as well as general satisfaction with the program. Results suggested generally positive reactions from students whose responses indicated that some activities are perceived as fostering content learning with others fostering language learning. Analysis of the questionnaires showed that results differed considerably for each content course as well as its adjunct language course, highlighting the special demands this type of immersion teaching places on teachers.

To grow, the TESL profession needs ongoing exploration into current practice and new areas of research that might improve current practice. The quest for new and more appropriate ways to meet the challenges TESL professionals confront on a regular basis in our teaching is illustrated and promoted in this issue of Contact.

We are confident that the papers included in this issue will inspire you to experiment with a new methodology or new techniques in your classrooms. It has been a pleasure to work with colleagues who shared their expertise and insights during the Research Symposium and to prepare this Special Research Symposium Issue for Contact readers.

Hedy McGarrell,  
Robert Courchêne  
Co-editors

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Sandra Burger recently retired from the Institut des langues officielles et du bilinguisme (ILOB) but continues her interest in immersion research. Her other research areas are key visuals for listening comprehension and vocabulary acquisition.

Parto Pajoohesh is a research fellow at the University of Alberta. She has been an ESL teacher trainer at two of Toronto’s TESL certificate programs and has extensive experience in EFL teaching. She received her doctorate in second-language education from OISE/University of Toronto.

Lynn Collins is an ESL teacher at Bow Valley College in Calgary, Alta. She participated in the college’s Bridge Program as a teacher and a mentor.

Luciana de Oliveira is an assistant professor of literacy and language education at Purdue University. She has served as TESOL’s Non-native English Speakers in TESOL Caucus Chair. Her research interests include the development of academic literacy in the content areas in secondary school, second language writing, and non-native English-speaking professionals.

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Abstract

The authors describe the academic vocabulary component of an advanced vocabulary development course offered in a university setting. This component is based on Coxhead's (2000) Academic Word List (AWL). Teaching materials for the course included authentic readings from different areas of study, comprehension exercises, structured production exercises, free writing and discussion practice as well as word study and strategy-building exercises. The authors describe the process of developing a test that could be used in this, as well as possibly other teaching situations, as a pre- and post-test to measure students’ acquisition of words taught. They intended to compare students’ acquisition of AWL words taught with that of words not taught. Various testing techniques explored are described, including the two formats chosen (a matching test and a completion test). Two versions of the test were piloted in the university course and descriptive and inferential statistics, along with a computer-generated item analysis are discussed. The authors concluded that the matching test was not suitable for measuring depth of vocabulary knowledge. Although no significant differences were found between words taught and those not taught on the completion task, the researchers considered it the most promising testing format in this situation.

In the context of an advanced vocabulary development course that forms part of a university-level major in English as a Second Language (ESL), the researchers have developed course materials to teach academic vocabulary as part of the curriculum for the course. The words chosen for intensive practice were selected from Coxhead’s (2000) Academic Word List. Coxhead compiled a corpus of 3.5 million running words from 414 scanned academic texts comprising more than 400 authors. The academic texts were taken from four areas of study: the arts (including education, history, linguistics, etc.); commerce (including accounting, economics, marketing, etc.); law (including criminal, family, international, etc.); and science (including biology, chemistry, computer science, etc.). To be included in the list, words had to be outside the 2000-word General Service List, to occur at least 100 times in the corpus and to appear at least 10 times in each of the four main fields of study. Thus, the words selected are common to all areas of study, with 567 of them on the Academic Word List. The AWL is a very useful tool for teachers working in an academic setting; 160 of these words were included in the vocabulary development course described in the following.

Data from first language acquisition (Cummins, 1984; Nation, 1990) suggest that reading must play an important role in vocabulary acquisition because children’s vocabulary increases dramatically once they have learned to read. Research on second language acquisition, (Wesche & Paribakht, 1996; Paribakht & Wesche, 1997; Laufer, 2003), however, has shown that reading alone is not sufficient for vocabulary acquisition. Conse-

(Continued on page 7)
 Frequently Paribakht & Wesche (1997) recommend a “reading-plus” approach, according to which students first read the words in a meaningful context and then engage in a range of vocabulary exercises based on the texts they read. Laufer (2003), too, recommends combining word-focused tasks with reading. She also recommends combining productive exercises with receptive ones. The vocabulary development course follows these guidelines.

Context

The advanced vocabulary course is a one-semester, 3-hour-per week course (39 contact hours) for advanced ESL students who have already reached the 2000-word General Service List level. In addition to the AWL component, which is the focus of this paper, attention is also paid to idioms when time allows. Another component of the course is student presentations of 20 thematically-related words or idioms for in-class and individual study. Finally, each student compiles and studies a list of 100 words of their own choosing. These must be words not included in the other components of the course.

Materials

The authors’ approach in the AWL component of the course in which this study was conducted is to organize words thematically. Students work on 20 words per unit, which the authors considered a manageable number. Students in the course first encounter the words in authentic reading passages chosen from different areas of study. Each of the academic readings is written by internationally-known Canadian or American authors such as David Suzuki, Jay Ingram, Neil Postman and David Gleick.

Based on their experience as teachers and their understanding of the research on vocabulary acquisition, the authors have come to the conclusion that new vocabulary is best encountered through reading authentic texts. In post-secondary learning situations, they consider it important to take advantage of authentic interdisciplinary academic texts. Such texts tend to provide a richer environment for the exposure to words than the modified input normally found in ESL/EFL textbooks. When students see words in authentic contexts, they learn how the words function and what their typical collocations are. Within the framework of the course under discussion, a list of the 20 words in all forms targeted for study in a given unit follows the reading. After the reading, students complete comprehension questions (multiple-choice, true/false, etc.) to ensure that they have understood the reading and are prepared to work in a meaningful context.

After students have focused their attention on the new words and deduced their meanings, they are first given opportunities to practise each new word in structured exercises. These exercises aim to fine-tune students’ understanding of the meaning of the words and focus their attention on word forms. Students are thus led to move from recognition to production tasks. Some examples of the structured exercises follow in Document 1.

The practice exercises are followed by controlled writing practice using the new words. (See example Exercise IV).

In addition, strategy building exercises, such as guessing the meaning from context, are useful. (See example Exercise V).
Document 1: Examples of structured exercises.

I. Indicate which of the three or four words in the group is different in meaning from the word in the vocabulary list.

<table>
<thead>
<tr>
<th>Word List</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>aggregate</td>
<td>total, average, sum</td>
</tr>
<tr>
<td>dominant</td>
<td>ruling, controlling, domestic</td>
</tr>
<tr>
<td>exploit</td>
<td>destroy, take advantage of, use</td>
</tr>
<tr>
<td>derive from</td>
<td>originate from, trace to, inherit from</td>
</tr>
</tbody>
</table>

II. Complete each sentence with the correct word form.

exploit, exploitation, exploitative, exploitable, exploited

- It is very short-sighted not to __________ our own resources.
- He wants to raise awareness of the plight of the elephants being __________ for their ivory.
- The company should increase wages and prevent feelings of ____________.
- Alberta has lots of __________ reserves of natural resources.
- Western coffee buyers continue to support an __________ trade system.

III. From the following list, select a synonym to replace each bolded word in the sentences below. Be sure to use the correct tense and word forms and endings in the new sentences.

vary, deplete, interact, origin

1. Some studies suggest that 50 to 60 percent of the workforce is now being hired after having networked.

2. The continued exploitation of forests, rivers and seas will result in more fierce competitions for the available resources.
IV. Read the following paragraph.

A] Cultures can adapt much more quickly than genes to new threats and needs. B] In anthropology, culture is usually defined as the whole of any society’s knowledge, beliefs and practices. C] It includes all our customs, habits and our technology. D] It is culture that has enabled us to survive. E] The flexibility of the human brain’s interactions with nature through culture has been the key to our success. F] Humans are not the fastest creatures nor the strongest. G] We have no claws or fangs. H] Our brains have enabled us to adapt to changing conditions, to devise tools and weapons and to use our knowledge of other creatures to protect ourselves and to feed ourselves. I] Thanks to simple technology we have spread all around the planet and now dominate it. J] Unlike other creatures we have developed civilizations, complex societies based on the domestication of plants, animals and sometimes other human beings. K] Cultural growth runs far ahead of evolution because it takes time for a long-termed species like ours to evolve significantly.

Restate the numbered sentences, using the words in the given forms. You may need to add words or change word order to make the sentences logical and grammatical.

1. Sentence D] ... cultural ... survival
2. Sentence H] ... adaptation ... devices
3. Sentence I] ... dominant
4. Sentence J] ... domesticate
5. Sentence K] ... Evolutionary

V. Sometimes the context in which you meet a word can help you guess its meaning. There may be an example or a situation given. Comparison or contrast clues can also help. You may even find a synonym or a direct explanation.

Read each sentence or group of sentences from the text carefully. Use the context clues to guess the meaning of the boldfaced word. What was the clue that helped you?

1. “I once asked Harvard University’s eminent biologist Edward O. Wilson... and he gave an animated response.”
2. “...each doing a different function – cutting the leaves, looking after the queen, taking care of the young, digging the nest out and so on –”
3. “the network of mycelia, threadlike extensions of fungi found in the ground, could be derived from a single individual, not an aggregate of different organisms.”
Each unit concludes with open-ended activities. Such discussion and writing activities encourage the use of the newly-acquired vocabulary through critical thinking and the expression of thoughts and opinions orally as well as through creative free writing. In this way, learners consolidate the material learned in potentially challenging and motivating ways. Thematically relevant supplementary material, such as videos and movies may be used, if time permits, either for listening practice or for idea generation.

Designing the Test

The researchers intended to develop a standardized test that would be useful in other teaching situations besides their own. The goal was to develop two versions of a test, one that could be used as a pre-test to check students’ knowledge of target words before the start of a course and the other as a post-test to measure achievement after instruction and study of the words in a class situation. The researchers wanted to test a reasonable number of words (36) but, since most students in the course were taking at least one regular discipline course in English concurrently with the vocabulary development course, they judged it useful to add words (36) from the AWL that had not been taught. In line with Paribakht & Wesche’s (1997) findings and Laufer’s (2003) recommendations, the hypothesis for this study was that students would show greater improvement in their knowledge of words taught compared to words not taught, even if they had been exposed to the untaught words in meaningful contexts.

The authors explored several possible testing formats in developing their test, some of which (e.g., Anderson & Freebody’s test, 1981) claim to measure breadth (size) of vocabulary knowledge while others focus on depth (quality) of knowledge. The following test formats were explored.

Multiple Choice

This common task type is popular because it is easily and “objectively” scored. Such tests, however, need to be carefully prepared and field-tested to ensure validity. Furthermore, the task involves factors other than word knowledge, such as reading ability, knowledge of words and syntax in the distractors and skill at guessing and thus may provide an erroneous picture of the test-taker’s knowledge of the target words.

Checklist

The checklist is a self-report measure in which the test-takers indicate how well they know a word. To enable scorers to adjust for students’ possibly inflated reports, Meara and Jones (1988) have inserted imaginary words in their placement tests. This task enables testers to test a large sample of words, but does not test multiple meanings of words or their collocations.

Error Recognition

Another promising test format (Arnaud, 1989) requires test-takers to indicate errors in 80 written sentences. Thirty sentences are correct while 25 contain vocabulary errors and 25 contain grammatical errors. Although a test using this format seems easy to construct and score, the authors admit that metalinguistic knowledge influenced the scores.
The C-Test

In the C-test, developers usually delete the second half of every other word in some sentences of a text. The format was originally developed to test overall proficiency. Klein-Braley (1985:79) suggests that this is appropriate because it requires learners to "use all levels of language to restore/reconstruct the text...grammatical, syntactical, lexical, semantic, collocational, contextual, pragmatic, logical, situational clues (and no doubt many others)." Yet Singleton & Little (1991) propose the C-test as a measure of vocabulary because items are contextualized in texts that illustrate real language use. Successful completions require knowledge of word characteristics (phonemic, graphemic, morphemic, syntactic, pragmatic and collocational). Chapelle (1994) asks the obvious question: if the test was considered appropriate for measuring overall proficiency, how can it just measure vocabulary knowledge? She further points out that although producing the output does require vocabulary knowledge of word characteristics such as orthographic, derivational and inflectional properties, if the items are content words, processing the input of the test requires knowledge of vocabulary, morphology, syntax and some aspects of textual competence, as well as reading process. She further maintains that the word and sentence constraints preclude tapping sophisticated word knowledge.

The Productive Vocabulary Levels Test

The Productive Vocabulary Levels Test developed by Laufer & Nation (1999:37) is a "controlled productive ability test." It resembles the C-test, but the target words are tested in the context of individual sentences rather than paragraphs. Instead of supplying the first half of a word, test developers give test-takers the minimal number of letters required to "disambiguate the clue" (p. 37). This is to preclude having to accept other possible words in the blank. The size of the underlined space to be filled is uniform for all items so that there is no indication of the number of letters needed to complete them. Minor spelling mistakes are not marked as incorrect and grammar mistakes are ignored. The test is very practical, easy to administer and can be completed in a short time.

Matching Words with Definitions or Synonyms

In this format, Nation (1990) gives students groups of 6 words and 3 definitions or synonyms, which match 3 of the words provided. He suggests that the extra words in each group minimize guessing. This test seems easy to develop and score once one has selected the words. Of course, the definitions must clearly match the 3 words to be selected.

The Vocabulary Knowledge Scale

The Vocabulary Knowledge Scale (VKS) (Wesche & Paribakht, 1996) is a self-report and elicitation measure designed to tap depth of vocabulary knowledge. Test-takers are given a list of words. For each word they indicate whether or not they have seen the word, if they know what it means, what they think it means, or what they are sure it means. They are also asked to indicate whether they can use each of the words in a sentence which shows they know the meaning of the word. Thus, students
receive a perfect score for that item if they show ability to define the word precisely and to use the word correctly as well as productively. The scoring system is straightforward and easy to use. This test seems to require test-takers to invest more time and effort in the task than most other tests require. Thus, there must be a limit to the number of words that can be tested in any one session.

The Pilot Test

After consideration of all these possible test formats, the authors decided to adopt the matching and definition task as developed by Nation (1990) and the format of Laufer & Nation’s (1999) Productive Vocabulary Levels Test. The matching task was chosen because we expected it would tap students’ receptive knowledge of the target words, enable us to test a fairly large number of words and be easy for students to complete. Using the format of The Productive Vocabulary Levels Test was expected to enable us to test controlled productive ability. The constraints of the sentence ensured that supplying the correct answer would indicate knowledge of the collocation and grammatical function of the word as well as morphological forms. The provision of the first letters of the required word precluded the choice of synonyms.

The researchers constructed two forms of the test (Version A as the pre-test and Version B as the post-test) designed to assess students’ acquisition of words taught in the course. There were two parts to each version of the test: one matching and one completion. Thus, on each section of the tests, all the words (36) were taken from the Academic Word List, half taught (18 words) and half not taught (18 words).

In the matching test students were presented with a group of six focus words from which they choose a matching definition or synonym among three possibilities. Only three match the definitions. (See sample matching test).

Sample matching test

1. affect
2. component _______ make up one’s mind
3. ethic _______ form or variant of something
4. parallel _______ extending in the same direction
5. resolve
6. version

Sample completion test

1. The roof col___________ under the weight of the ice.
2. Lack of sunlight can af___________ our mood.
In the completion test students were given part of a word in a sentence. The length of the partial word supplied was enough to ensure an obligatory context for the word. Students were asked to complete the word. (See sample completion test).

This new test was piloted in the advanced vocabulary development course. Version A was administered at the beginning of the course and Version B at the end of the course approximately 11 weeks later. Some of the words from Version A appeared again in Version B. This was true for both the completion and the matching tests. Financial and program organizational limitations did not allow the researchers to conduct a delayed post-test.

Results and Discussion

The Matching Test

Basic descriptive statistics for the matching test are found in Table 1. The mean on the post-test (Version B) was higher than on the pre-test (Version A).

(Continued from page 13)

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Results and Discussion

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(Continued on page 14)

Table 1: Descriptive Statistics: Matching Test

<table>
<thead>
<tr>
<th></th>
<th>Version A</th>
<th>Version B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of items</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Number of test takers</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Range of student scores</td>
<td>24-36</td>
<td>18-36</td>
</tr>
<tr>
<td>Mean</td>
<td>82%</td>
<td>88%</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.30</td>
<td>5.03</td>
</tr>
</tbody>
</table>

Table 2: Per Person Analysis: Matching Test

<table>
<thead>
<tr>
<th>Test takers</th>
<th>Version A (Pre) n = 35</th>
<th>Version B (Post) n = 36</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>35</td>
<td>33</td>
<td>-8%</td>
</tr>
<tr>
<td>B</td>
<td>30</td>
<td>35</td>
<td>+11%</td>
</tr>
<tr>
<td>C</td>
<td>25</td>
<td>18</td>
<td>-21%</td>
</tr>
<tr>
<td>D</td>
<td>31</td>
<td>34</td>
<td>+5%</td>
</tr>
<tr>
<td>E</td>
<td>31</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>29</td>
<td>32</td>
<td>+6%</td>
</tr>
<tr>
<td>G</td>
<td>32</td>
<td>36</td>
<td>+9%</td>
</tr>
<tr>
<td>H</td>
<td>31</td>
<td>32</td>
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</tr>
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<td>30</td>
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<tr>
<td>J</td>
<td>35</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>K</td>
<td>25</td>
<td>29</td>
<td>+9%</td>
</tr>
</tbody>
</table>
A), but as the range and the standard deviations suggest, there was greater variation in scores on the post-test. The greater variation in scores at the end of the course reflects student profiles in the course with respect to study habits, learning styles and their exposure to English outside the vocabulary development class. Thus it is worthwhile to look at individual cases. Table 2 shows each individual’s pre- and post-test scores. Most students’ results reflected at least minor improvement. Student C, whose performance declined, was a newly-arrived international student taking all her courses in English. This proved to be very demanding for her and she could not devote enough time to the practice required for improvement. The drop in the scores of students A and I could partly be a reflection of measurement error that might have occurred due to factors other than word knowledge, such as motivation, fatigue, noise in the exam room, etc.

It should be pointed out that the matching test is a recognition test, meaning that students might know the word well enough to answer the matching question correctly without having more in-depth knowledge of the word. Many factors are involved in this type of task, including the quality of items themselves and the exposure the students have had to academic words in other contexts. Furthermore, vocabulary knowledge is a continuum, and this test primarily targets the passive recognition and the understanding of the root meaning of words. Therefore, it is difficult to interpret the simplistic numeric scores and attempt to explain anomalies. Thus, the results of this portion of the test do not really allow us to draw any conclusions either about students’ previous knowledge of the words tested or their acquisition of the words during the semester. The test seems to involve other variables, such as students’ test-taking skills, their knowledge of the synonyms suggested and variation in their performance due to other factors.

### The Completion Test

Basic descriptive statistics for the completion test are presented in Table 3. The mean on Version B, the post-test, was noticeably higher than on Version A, the pre-test, but as the range and the standard deviations suggest, there was greater variation in scores on the post-test.

A computer-based item analysis of the test was performed. This analysis compared the score on each item with the students’ overall scores on the test to see if the item was measuring the construct. These correlations are called biserials, which are an indication of the success, or the lack of success, of

### Table 3: Descriptive Statistics: Completion Test

<table>
<thead>
<tr>
<th></th>
<th>Version A</th>
<th>Version B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of items</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Number of test takers</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Range of student scores</td>
<td>11-29</td>
<td>14-34</td>
</tr>
<tr>
<td>Mean</td>
<td>53%</td>
<td>71%</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>5.22</td>
<td>6.13</td>
</tr>
</tbody>
</table>

(Continued from page 13)
an item. A correlation is by definition between plus and minus 1.00. The closer the correlation is to plus 1.00, the higher the correlation. Since our test was still at the pilot test stage, we were still identifying items that needed repair. The computer analysis indicated that 5 items on Version A and 1 item on Version B needed repair. A close examination of these items and their corresponding student responses showed that one was too easy, in one case only one of the computer-identified strong students got the item right, and one item had another quite plausible answer. Some of the problems might be an artefact of the small number of participants.

The mean test scores reflected in Table 3 indicate general improvement on Version B, the post-test. As there were differences that might need to be analyzed further, the researchers decided to look more closely at the individual scores. Table 4 shows each individual’s pre- and post-test scores. With one exception, students made noticeable improvement. The issue of whether the results were significant will be addressed with the ANOVA figures in Table 6 and the discussion that follows.

Student K’s score remained the same, while all the others showed improvement. Since the hypothesis of our study was that students would show greater pre- to post-test improvement

(Continued from page 14)

Table 4: Analysis of Individual Scores: Completion Test

<table>
<thead>
<tr>
<th>Test takers</th>
<th>Version A (Pre)</th>
<th>Version B (Post)</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25</td>
<td>32</td>
<td>+19%</td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>28</td>
<td>+28%</td>
</tr>
<tr>
<td>C</td>
<td>11</td>
<td>14</td>
<td>+8%</td>
</tr>
<tr>
<td>D</td>
<td>23</td>
<td>33</td>
<td>+28%</td>
</tr>
<tr>
<td>E</td>
<td>18</td>
<td>23</td>
<td>+14%</td>
</tr>
<tr>
<td>F</td>
<td>13</td>
<td>22</td>
<td>+25%</td>
</tr>
<tr>
<td>G</td>
<td>22</td>
<td>28</td>
<td>+17%</td>
</tr>
<tr>
<td>H</td>
<td>16</td>
<td>23</td>
<td>+19%</td>
</tr>
<tr>
<td>I</td>
<td>14</td>
<td>25</td>
<td>+31%</td>
</tr>
<tr>
<td>J</td>
<td>29</td>
<td>34</td>
<td>+14%</td>
</tr>
<tr>
<td>K</td>
<td>17</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

(Continued on page 16)
on the items taught than on those not explicitly taught, students’ scores on taught versus not taught items were compared. Table 5 displays the descriptive statistics.

There appears to be greater pre- to post-test improvement on the items taught compared to those not taught.

In view of the noticeable pre- to post-test gains, a post-hoc ANOVA was run with the pre-test scores as covariates with the post-test scores to see if the differences were significant, i.e. not due to chance. The ANOVA is a statistical procedure designed to examine whether the differences between means are due to some treatment (in this case the vocabulary teaching,) or whether they are simply due to chance. If the results are significant, i.e., usually less than .05, it can be concluded that the observed difference is not likely due to chance or naturally occurring variation. Table 6 displays the results. The significance value is shown in the last column.

The ANOVA analysis did not show statistically significant differences, raising doubts about the suitability of the testing format used to assess the kind of vocabulary knowledge in ques-

(Continued on page 17)

Table 5: Descriptive Statistics Taught Words versus Not-taught Words

<table>
<thead>
<tr>
<th>n = 36</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test (Taught)</td>
<td>9.73</td>
<td>3.41</td>
<td>4-15</td>
</tr>
<tr>
<td>Version B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test (Taught)</td>
<td>13.36</td>
<td>3.5</td>
<td>7-18</td>
</tr>
<tr>
<td>Version A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test (Not taught)</td>
<td>9.00</td>
<td>2.53</td>
<td>6-14</td>
</tr>
<tr>
<td>Version B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test (Not taught)</td>
<td>11.64</td>
<td>3.61</td>
<td>7-16</td>
</tr>
</tbody>
</table>

Table 6: ANOVA - Words Taught versus Not Taught

<table>
<thead>
<tr>
<th>Source Variation</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate Pre-test</td>
<td>84.089</td>
<td>1</td>
<td>84.089</td>
<td>9.454</td>
<td>.006</td>
</tr>
<tr>
<td>Main effect (group)</td>
<td>8.195</td>
<td>1</td>
<td>8.195</td>
<td>.921</td>
<td>.349</td>
</tr>
<tr>
<td>Explained</td>
<td>100.498</td>
<td>2</td>
<td>50.429</td>
<td>5.649</td>
<td>.012</td>
</tr>
<tr>
<td>Residual</td>
<td>169.002</td>
<td>19</td>
<td>8.895</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>269.500</td>
<td>21</td>
<td>12.833</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The authors chose a controlled productive ability test to assess vocabulary development because they hypothesized it would measure a deeper level of knowledge of the targeted words. Chapelle (1994:176) states that producing the correct answer requires knowledge of the “formal features of the words as well as the processes required to compose the morphological form in the sentence context.” Therefore, the test requires more than word recognition and word retrieval. In the vocabulary development course, students complete many exercises practising how to manipulate the words and to use them in different contexts. However, these pilot test results did not show greater mastery of the targeted words as expected.

Reasons for the above results may be manifold, including the assumption that students may have learned the non-taught AWL words tested intentionally, on their own, by applying what they had learned in the vocabulary course. In the course they practised dictionary use, studied word formations and developed sensitivity to the context of words. Thus, they may have been applying a “reading-plus” approach on their own, not just relying on incidental exposure to the words not taught.

Wesche and Paribakht’s (1996:29) vocabulary knowledge scale (VKS) measure, because it requires students to provide a synonym for words and asks them to use the words in sentences, would perhaps produce a more accurate picture of students’ depth of knowledge of the words. Although Wesche and Paribakht describe their instrument as a “relatively efficient way certain stages in their [students’] initial development of core knowledge of given words” can be captured, the technique makes definite demands of time and effort on students. The authors felt, because of the large quantity of words they wished to test, the VKS format would have resulted in a lengthy and demanding test, and would therefore have been impractical in this case.

Conclusion

The authors used two techniques to measure students’ changes in knowledge of words taught in their advanced vocabulary development course. The first one, the matching technique, was not successful in revealing how well students had learned particular words because factors other than word knowledge seemed to come into play. Based on the results from this study, the matching technique is not a recommended format for assessing depth of vocabulary knowledge. The second technique, the completion task, was more successful. Although the pre-post-test differences were not statistically significant, the differences were noticeable. The non-significant results might have been due to the small number of participants in the study. Thus, the jury is still out on whether it would be a suitable measure for vocabulary depth, capable of measuring gains in the context of an advanced vocabulary test. It should be tried again with a larger group of participants, once the faulty items identified by the biserials as not successfully testing the targeted words have been repaired.

...the jury is still out on whether it would be a suitable measure for vocabulary depth...
References


Abstract
How well do learners of a second language know the words they already know? This question refers to the distinction between depth and breadth of one's vocabulary knowledge. Lexical depth, or the richness of the knowledge of the known words/concepts (Wesche & Paribakht, 1996), has been an often overlooked area in the vocabulary research on adult and child English language learners. On the other hand, vocabulary breadth, or size, and its measurement have attracted many research studies. The neglect of lexical depth does not, however, negate its importance in language development. This paper provides an overview of the concept of lexical depth, its various components and the assessment tools developed to date. It further describes a study on the lexical depth of child learners of English and, finally, presents some guidelines for the enhancement of the lexical depth knowledge of English language learners.

The concept of lexical depth

The growth of a lexicon is the acquisition not only of more and more words, but the acquisition of multiple aspects of word meaning as well. Vocabulary knowledge therefore develops along two axes: lexicon size and lexicon depth. While learners may know the (core) meaning of a word well enough to produce it spontaneously, they may not be able to use the word effectively and appropriately when they speak, listen and write (Harley, 1996; Schmitt & Schmitt, 2005).

Lexical depth knowledge covers many aspects related to the development of literacy skills and reading:

- Phonological/orthographic representation of words (Snow & Locke, 2001)
- Syntactic properties: knowing which word form (part of speech) to use (knowledge of word families) (Schmitt & Schmitt, 2005)
- Morphological structure: knowledge of word roots and derivations
- Collocations: knowing how to combine the words with other words
- Definitions: knowing how to describe a word in decontextualized language
- Word associations: knowing how words/concepts are linked in the semantic network

(Continued on page 20)
• Pragmatic rules: knowing how to use words appropriately in different contexts

Learning all the above aspects of word meaning requires many encounters with a word since each unique encounter usually results in a small gain in knowledge (Nagy, Herman & Anderson, 1985). Through subsequent encounters, one usually expands the semantic specification which leads to building depth of knowledge (Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively & White, 2004). For language learners, this expansion or deepening of one’s lexical knowledge would ultimately ease the processes of language comprehension and production. In the case of school-age language learners, children may find it difficult to handle the technical words and abstract concepts in cognitive operations or academic skills such as paraphrasing, constructing analogies and metaphors, and providing standard definitions.

Breadth (Quantity) vs. Depth (Quality) of Word Knowledge: Research Origins and Purposes

Before attending to the details of lexical depth in the paper, an overview of the background research on vocabulary size and depth helps to highlight the importance of lexical depth for ESL learners. Historically, certain educational situations opened doors to a large amount of research on vocabulary size, which eventually led to the design of relevant assessment measures. As Read (2000) recounts, reading researchers first showed interest in how the vocabulary knowledge of native English speakers grows with age and how it relates to reading comprehension. This line of research has had implications for the design of reading programs in schools and the way new vocabulary can be introduced for different age levels (Anderson & Freebody, 1981). Second, the age-based estimates of native speaker vocabulary size initiated research on the acquisition of L2 vocabulary by children entering school with limited knowledge of the language of instruction (Cummins, 1981; Harklau, 1994). Third, some researchers working with international students tried to find out the minimum number of words such students would need to know when English was the new language of instruction. Relevant research shows inconsistent findings about this minimum requirement. For example, Sutarsyah, Nation and Kennedy (1994) indicated that 4000-5000 words would be required for international students to understand undergraduate textbooks on such topics as economics written in English, whereas Hazenburg and Hulstijn (1996) estimated a vocabulary of 10,000 Dutch words would be required for learners of Dutch entering a university in the Netherlands. This kind of research is based on the assumption that learners of a language need to know at least 95 percent of words in a text in order to read independently (Read, 2000). Nation (1990) and Laufer (1992) believe a vocabulary of at least 3000 word families is necessary to fulfill this requirement. It is ap-

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1. Word family refers to a set of word forms (including inflectional endings and derived forms) that share a common meaning. For example, leak, leaks, leaking, leaked, leaky, leakiness, leakage and leaker are closely related in form and meaning.
parent from the above examples that a certain level of vocabulary is necessary for reading comprehension in an L2. However, the productive language skills (needed in writing essays, reports, etc.) require more than just a large vocabulary. In order to have a rich and well-rounded knowledge of words, or reach a certain threshold, as a prerequisite for effective language use (Read, 2000), learners need to expand their lexical knowledge in both breadth and depth.

Compared to the amount of research on vocabulary size, the research on lexical depth has been more limited, despite the variety of purposes it has served. According to Read (2000), the first area of research on lexical depth originated from attempts to validate vocabulary tests of a quantitative nature (e.g., multiple choice or matching tests). To do so, after sitting the test, test takers were interviewed to probe the depth of their word knowledge to find out to what extent the test scores were consistent with the interview results. The second purpose for research into lexical depth involved measuring the partial knowledge of words in the studies on incidental vocabulary learning during reading. For example, Wesche & Paribakht (1996) designed and implemented a measure called Vocabulary Knowledge Scale (VKS) for their study of undergraduate ESL students. The test is a generic tool and can be used with any words that are to be assessed.2 The third purpose, in the context of English for Academic Purposes (EAP), involved researchers (Read, 1998; Schmitt, 1999) who developed tools to assess students’ thorough knowledge of words they encounter in academic texts. The assessment, aimed at exploring the knowledge beyond synonyms and L1 equivalents, led to the preliminary design of word association tests (also see Nurweni & Read, 1999). The fourth and last purpose of research into lexical depth refers to some observations of the low L2 achievement of children from immigrant families in various contexts. The observations attracted the researchers’ attention to the large lexical differences between L2 child learners and their native-speaker peers (e.g., Cummins, 1981; Snow, 1990; Verhallen & Schoonen, 1993, 1998a). This aforementioned purpose of research on lexical depth will be discussed in detail in the following section of the paper.

In terms of vocabulary assessment tools, there seem to be more known (if not designed) measures to assess vocabulary size than depth. Examples include the Vocabulary Levels Test (Nation, 1990), the revised version of the Vocabulary Levels Test (Schmitt, Schmitt & Clapham, 2001) and the Eurocentres Vocabulary Size Test (Meara & Buxton, 1987; Meara & Jones, 1990a; Meara & Jones, 1990b). For depth of vocabulary, as mentioned earlier, the VKS and the word association tests have been used as generic tools. Further, some studies

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2. VKS contains 5 categories of self-report and the test-takers decide which category best represents how well they know the word (as cited in Read, 2000, p. 133):
   I. I don’t remember having seen this word before.
   II. I have seen this word before, but I don’t know what it means.
   III. I have seen this word before, and I think it means ___. (synonym/translation)
   IV. I know this word. It means ___. (synonym/translation)
   V. I can use this word in a sentence: _______. (If you do so, please do section IV)
have supplemented the word association test with interviews or think-aloud protocols in order to probe more into the depth of lexical knowledge.

**Child L2 Learners and the Significance of Lexical Depth**

Snow & Kim (2006) characterize vocabulary as an extremely large problem space for child language learners of English. Within this space, areas such as learning the 26 letters, 44 phonemes, and numerous spelling rules pose fewer problems than does learning skills such as acquiring 75,000 separate words each with its own meaning, pronunciation and orthographic form as well as its own syntactic and morphological parameters. Additionally, lexical knowledge is a determining factor in reading comprehension and other literacy skills. Research with Latino children in the U.S. (García, 1991; Nagy, 1997; National Institute of Child Health and Human Development, 2000; Verhoeven, 1990) and Turkish/Dutch bilinguals (Verhallen & Schoonen, 1998a) suggest that inadequate breadth and depth of vocabulary knowledge has been a major source of poor reading comprehension among lagging readers.

A lack of depth of knowledge of the low and mid-frequency academic words that children usually encounter in school texts (Stanovich, 1986) during upper elementary (ages 11-13) and secondary school impedes the natural process of expanding word meanings during reading. What is crucial about the role of lexical knowledge, specifically its depth, is the fact that as schooling proceeds, children need to learn technical and disciplinary vocabulary as well as concepts not found in their everyday spoken language. For instance, in mathematics, students are expected to use appropriate vocabulary — *explain or define*, and *support solutions to problems* — in a logical way through oral interaction and writing. In the social sciences as well, abstract concepts (e.g., democracy) are expressed orally and in writing. Toward middle school, the nature of classroom instruction, texts and literacy practices become progressively more specialized. Therefore, the literacy ability that was functional in the primary grades becomes inadequate to allow students to deal with genre-specific demands (Carrasquillo, Kucer, & Abrams, 2004). Research shows that while L2 learners who arrive in U.S. grade 2 and 3 classrooms with no English vocabulary knowledge quickly develop oral English vocabulary, they may lag behind those who have been exposed to oral *and* literate English since birth (Carlo et al., 2004).

At this point, it is imperative to look at the importance of lexical depth in child development from a cognitive point of view. As part of their cognitive development, children acquire words and concepts through their daily encounters. However, this acquisition does not happen by mere clustering of meaning aspects in a random manner (Vygotsky, 1962); instead, it develops in several stages of *labeling, categorizing* and *network building* (Aitchison, 1994). While categorizing words/concepts is an essential part of concept development, children also need to build semantic networks to link concepts and their meanings to other aspects in the mental lexicon. This process highlights the hierarchy of lexical knowledge...

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3. It is estimated that high-school graduates need to know 75,000 English words, learning approximately 10-12 words daily between the ages of 2-17. (Snow & Kim, 2006)
chical relations between the concepts in the example of plant, flower, tulip/rose. The development of such a hierarchical semantic relationship, called paradigmatic meaning relation/s follows an earlier stage when children first relate rose, tulip and daisy in a linear manner, referred to as syntagmatic meaning relations (Verhallen & Schoonen, 1993). An example of syntagmatic relations is ‘a rose grows on a bush/has thorns on the stem’. The paradigmatic relations basically refer to class-inclusion relations (rose is a flower) and part-whole relations (hand is a part of body). A shift from syntagmatic to paradigmatic ordering is essential particularly in the upper levels of primary education, when children are confronted not only with new words and concepts, but also with new meaning-relations between words and concepts. They also need the ability to handle abstract concepts in academic tasks that are mostly decontextualized and cognitively-demanding.

Aspects of Lexical Depth and their Assessment

There are two widely cited issues in the research into children’s lexical depth: the extent to which children have developed a semantic network, and whether they can express their deep word knowledge by formulating a well-structured standard definition for ordinary words and concepts. I have labelled the former aspect as the implicit and the latter as the expressible aspect of lexical depth (Pajoohesh, 2007). Previous research has shown that even if children possess a receptive knowledge of the meaning aspects of a word, they might not be able to define it in terms of hierarchical semantic relationships and proper structural format.

The concept of receptive or implicit knowledge of lexical depth has been rarely assessed. In only a few studies, versions of a word association test were used to reflect the receptive knowledge of the paradigmatic relations in adult learners (e.g., Read, 1998) and in L2 learner children (Carlo et al., 2004; Pajoohesh, 2007). As a generic recognition test, the items in a word association test require the test taker to identify and choose the paradigmatic meaning relations from a cluster of words that include the syntagmatic meaning relations as well. A particular version of the test, called a Word Association Test (WAT), was designed by Verhallen and Schoonen (1998b) to measure children’s receptive knowledge of lexical depth. I used the WAT, described below, in my study (Pajoohesh, 2007). To take the WAT, children need to make a distinction between those words that always associate with the stimulus word (paradigmatic/decontextualized) and those that only incidentally relate (syntagmatic/contextualized). For example, in the word ‘banana’ as a test item, three paradigmatic relations are offered: superordination fruit, subordination food, and part-whole association peel. Additionally, there are three syntagmatic or contextualized relations: nice, monkey, and slip (Verhallen & Schoonen, 1998b). The children’s version covers various semantic domains such as food, transportation, animals, professions, etc. that can be found in nouns, verbs and adjectives.

The unique feature of the WAT is that it assesses the degree of decontextualization of meaning assignments in the child’s lexical hierarchical network. Thus, the way children select associations implies that meaning assignments gradually become more decontextualized as lexical knowledge develops.

Somewhat related to children’s literacy development, many researchers have paid attention to the school task of providing definitions. This relatively complex verbal task has been the only method used so far to assess the ex-
pressible depth of word knowledge in a first or second language. As a genre-specific school task, frequently used for vocabulary training, it requires children to give definitions, look them up in the dictionary and copy them (Snow, Cancino, De Temple & Schley, 1991). The task requires not only a well-shaped hierarchical network of words/concepts in the mental lexicon, but also a familiarity with decontextualized language use, as well as an awareness of linguistic constraints required to form a definition (Snow, 1990). An example can be "a knife is a tool [paradigmatic] used to cut meat or to stab people [syntagmatic]" (taken from Ordóñez et al., 2002, p. 720). In addition to the necessity for a superordinate term (tool here), a formal definition needs a formal register or proper syntactic structure to match an adult-like Aristotelian definition:

"An X is a Y (a superordinate) that (followed by a restricted relative clause about attribute/property/somewhere/somehow)..."

The open-ended format of the task allows children to formulate, restructure, and convey meaning aspects/relations in the form of a definition, in their own words and in any language. While the Word Definition Task (or WDT) is productive in nature, the WAT acts as a recognition test. The WDT along with the English version of the WAT were used in the study that will be described in the next sections.

Recap of Research on the Lexical Depth of Child L2 Learners

Since 1990, a number of studies have focused their investigation on the word definitional skill of bilingual and L2 language learners as a window to their lexical depth. These studies cover several educational settings: a series of studies on Hispanic children in the US (e.g., Carlo et al., 2004; Ordonez, Carlo, Snow and McLaughlin, 2002; Snow, 1990; Snow et al., 1991), studies of immigrant children in the Netherlands (Verhallen & Schoonen, 1993; 1998a; 1998b), and the most recent, a study on immigrant Farsi-English children in Toronto (Pajoohesh, 2007) that will be presented here. The findings of the above studies agree on several points about L2 lexical depth in children:

1. L2 learners show restricted depth of lexical knowledge as measured by their definitions of words/concepts;
2. Larger L1 (or L2) vocabulary size may not correlate with vocabulary depth;
3. Insufficient vocabulary knowledge in terms of depth, if not diagnosed by assessment, can create academic gaps which may widen between L2 learners and native speaker children;
4. Explicit instruction or even intervention programs are needed to expand the lexical depth in content-based curricula.

In the following section, I will describe the details of my study (Pajoohesh, 2007) that explored the concept of lexical depth and its development among bilingual populations arriving in Canada and in relation to their various L1 literacy backgrounds, L2 schooling and length of residence in the L2 community. Many of the findings of this study confirm the results mentioned above.
The Study

The study explored how two groups of Farsi-English bilingual children, with and without content-based L1 schooling, and a monolingual English-speaking group displayed their lexical depth knowledge in English (and Farsi for bilinguals only) on the measures of implicit and expressible deep word knowledge (Word Association Test and Word Definition Task, respectively). The study intended to see 1) to what extent the children had developed the paradigmatic decontextualized knowledge of words/concepts under study and 2) to what extent they could express this knowledge in the form of standard definitions. It particularly considered the role of L1 schooling type (content-based or non-content-based) and L1/L2 schooling years in the performance of children.

Participants and Settings

Participants consisted of three groups of sixth graders attending regular (public) school in Toronto, Canada (see Table 1). The first group, labelled the Bilingual Content-Based (BCB) group, were immigrant children who had either some years of formal schooling in Farsi in their home country of Iran prior to immigration, or some years of content-based Farsi instruction at private Farsi schools in Toronto. BCB participants had age-appropriate native language skills. The second group, labelled the Bilingual Heritage Language (BHL) group, were also immigrant children with some basic Farsi literacy skills (reading/writing) as a result of attending heritage language programs in Toronto. They had some accent when speaking in their L1 and lacked a high command of oral communication skills. Some BHLs were born in Canada. Length of Residence (LOR) of the bilingual children ranged from 3-11 years. The third group, labelled the Monolingual English-Speaking (MES) group, were all born in Canada. Their parents were native speakers of English and they spoke only in English with their children at home.

All three groups had reached a similar level of English proficiency as measured with a proficiency assessment instrument, thereby controlling English proficiency in the study. The Farsi proficiency of the two bilingual groups was measured as well but not controlled. This means that the BCB group outperformed the BHL group in Farsi proficiency by large statistical differences.

(Continued from page 24)

4. The Toronto schools were supervised by the Ministry of Education in Iran and implement the same curriculum and textbooks as in the home country. They offer six to eight hours of instruction on weekends, and all school subjects are taught in Farsi.

5. The Heritage/International Languages program is supervised by the local board of education and as part of a Canadian federal multicultural initiative. The programs offer one three-hour class per week.

6. The Farsi proficiency of the two bilingual groups was measured by the Farsi translation of the Bilingual Verbal Ability Test (BVAT) (Munoz-Sandoval, Cummins, Alvarado & Ruef, 1998). For the English proficiency, the revised Vocabulary Levels Test was administered (Schmitt et al. 2001).
Methodology

As described above, the study assessed two aspects of lexical depth of the participating bilingual and monolingual children.

The Implicit Aspect:

I collected data about the implicit deep word knowledge of the participants in English by means of the WAT (Verhallen & Schoonen, 1998b), a version of a word association test, to investigate the extent to which children could identify the paradigmatic/decontextualized associations of the test items. Children were required to draw a line from the stimulus word to three of six meaning associations surrounding it to show the paradigmatic meaning relations (See Appendix 1 for sample items and list of the WAT items). The test consisted of 33 items, each worth one point if the test taker selected all three intended meaning relations.

The Expressible Aspect:

I used the Word Definition Task to measure the expressible aspect of deep word knowledge of the participants in terms of definitional quality in English (for BCB, BHL and MES groups) and in Farsi (for BCB and BHL groups).

The participating children provided definitions for 16 words taken from the WAT in answer to the question “What is a ___?” The quality of definitions elicited in the interviews was analyzed for semantic and syntactic content.

Table 1: Summary Table for Sample Population

<table>
<thead>
<tr>
<th>Group</th>
<th>Dominant language</th>
<th>Language spoken at home</th>
<th>LOR</th>
<th>Li schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCB (n=16)</td>
<td>Farsi</td>
<td>Farsi</td>
<td>3.8 yrs</td>
<td>Content-based schooling in Iran and/or Canada at Farsi private schools.</td>
</tr>
<tr>
<td>BHL (n=16)</td>
<td>English</td>
<td>Farsi/English</td>
<td>7.4 yrs</td>
<td>Basic literacy mostly through heritage language schools in Toronto.</td>
</tr>
<tr>
<td>MES (n=17)</td>
<td>English</td>
<td>English</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Note: LOR = (average) Length of Residence in Canada

“Children were required to draw a line from the stimulus word to three of six meaning associations...to show the paradigmatic meaning relations.”

(Continued from page 25)
based on a measure adapted from the Formal Definitional Quality Scale (Snow, 1990; Snow et al., 1991; Ordóñez et al., 2002). The scale, consisting of 3 categories: Syntax, Superordinate, and Definitional Feature, distinguished between well-formed and poorly-formed definitions.

On the Syntax scale, a definition was scored based on how closely it matched the ideal syntactic structure of standard definitions. For the Superordinate scale, definitions were ranked from zero to five depending on the type of superordinate used. In the example of ‘bicycle,’ children’s superordinates ranged from ‘a vehicle,’ ‘a kind of sport’ to ‘something’ or ‘thing.’ The Definitional Feature category measured participants’ syntagmatic knowledge including the use/function, composition, and attributions of the item (e.g., a bicycle ‘is fun to ride’/‘is fast’). Each correct definitional feature was awarded one point.

In the next section, a summary of the findings will be presented, along with some excerpts from the data on children’s definitions, to illustrate the nature of the lexical depth knowledge of the participants. While the statistical analyses of the study are reported elsewhere (see Pajoohesh, 2007), this paper presents a summary of the findings in relation to the concept of children’s lexical depth and the implications for ESL instruction.

Findings

Implicit Deep Word Knowledge

The findings for this receptive aspect indicated similar performances for the three groups (although the BCB group had a slightly lower mean average, there were no statistical differences). This finding shows that all participating children had developed the paradigmatic/decontextualized knowledge of semantic representations to the same level as measured by the WAT recognition task. Putting it into a more theoretical perspective, for the BHL group, this finding might be due to their longer LOR and L2 schooling experience, whereas, for the BCB group, such a performance could be the result of a transfer of already acquired/learned knowledge from Farsi to English. These findings will be discussed later in relation to the correlation analyses.

Expressible Deep Word Knowledge (English)

The other set of findings revealed various results for the three categories of the expressible aspect of lexical depth: Syntax, Superordinate and Definitional Feature. On the scale of Syntax, children from all three groups had similar performances, meaning that they had a fair knowledge of the syntactic conventions of a good definition.

On the other two scales of Superordinate and Definitional Feature, however, the groups showed differences in their performances. On the Superordinate scale, the BCB group could not perform as well as the other two groups. In fact, the largest differences were found in this area, implying that superordinates, which reflect the hierarchies in the semantic network, are rather infrequent terms that need to be re-learned in another language. The BHL and MES groups had similar performances on this scale. On the Definitional Feature scale which evaluated the knowledge of meaning relations in terms of physical and functional properties of objects/concepts, differences were found only between the BCB and MES groups. This means that the BCBs could not provide...
as many (correct) meaning relations in their definitions, compared to the MES group.

**Expressible Deep Word Knowledge (Farsi)**

Unexpectedly, the two bilingual groups had similar performances on all three categories of definitional quality. This implies that the BCB group, in spite of its dominance in Farsi and content-based experience in L1, was not able to use its academic/decontextualized Farsi repertoire in its definitional production. For the less-Farsi-proficient BHL group, however, it can be said that there were traces of transfer of knowledge and skills from English (stronger language) to the Farsi production of definitions. An interesting point in the data that supports these findings is that for Farsi superordinate production, the BCB children switched to English, which resulted in their lower scores on the scale, whereas they never switched to their stronger language (Farsi) for an English superordinate term that was unknown to them. This observation implies the stronger role of L2 as the curricular language.

**Synthesis**

A summary of the study’s major findings is in order here. The study revealed that the BHL children, due to the impact of L2 exposure and longer L2 schooling (English as the stronger language), performed as well as their monolingual peers on the English measures. By the same token, in comparison to their bilingual counterparts, they either produced definitions with higher quality or had at least a similar performance. The BCB group, on the other hand, showed a poorer performance on the expressible measures (except for syntax) in English/L2 compared to their bilingual and monolingual peers, and similar Farsi/L1 production when compared to their bilingual counterparts who were less proficient in Farsi. The findings on BCB children suggest a lack of transfer of decontextualized knowledge from L1 to L2, a result that was expected to occur due to their solid L1 academic foundation. The findings also imply that the BCBs need more L2 input/instruction to relate the concepts in their two linguistic and cognitive repertoires in order to use them to their academic benefit. Regarding the English implicit knowledge measure (WAT), although their similar performance might be the result of transfer of paradigmatic knowledge from L1 to L2, it is possible that they actually put to use the newly-learned L2 knowledge from their L2 schooling.

Furthermore, some correlational analyses that were conducted (see Pa-joohesh, 2007 for more detail) to investigate any relationships between L1/L2 schooling years/Length of Residence (LOR) and the bilinguals’ performance, strongly suggest that with more years of L2 schooling and LOR, the bilinguals had obtained higher scores in all L2 measures of implicit and expressible deep word knowledge; however, more L1 schooling, regardless of its type, did not promote the same knowledge/skills in L1. This has direct implications for the importance of L2 instruction in the curricular context.

**Some Excerpts from the Data**

I reported in the previous sections that the bilinguals had similar performance scores compared to the monolingual English speakers on certain measures or that the groups had a fair
knowledge of some areas of lexical depth such as syntactic form. It must be noted here that the fair knowledge or similar performance does not necessarily mean that they had a high level of the definitional knowledge (be it syntactic, paradigmatic or syntagmatic) as I will show in the excerpts below. The common finding of many studies on children's definitions in L1 and L2 refers to the fact that providing standard definitions as a literacy-based task and using superordinate membership for common objects are “late habits,” occurring long after children refer to some evident sensory-object properties (Benelli, 1988, p. 229). The following excerpts from the data illustrate this. Tables 2 and 3 provide definitions for the words ‘ambulance’ and ‘vegetables’ in English and Farsi. As is evident from Table 2, (Continued on page 30)

Table 2: Excerpts taken from the Data on English and Farsi Definitions for “Ambulance”

<table>
<thead>
<tr>
<th>Group</th>
<th>AMBULANCE (English definition)</th>
<th>AMBULANCE (Farsi definition)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MES</td>
<td>It’s like a car but it’s not really it’s kind of like a truck but um if somebody hurts himself badly and then they need to go to hospital and the ambulance goes and um picks some up and takes them very quickly to the hospital they can run through um red lights….</td>
<td>N/A</td>
</tr>
<tr>
<td>BHL</td>
<td>It’s a means of transportation to get people who are hurt to the hospital and they have… like medical machines inside to treat the patients and you call 911 for it and get out of the way if… it is an emergency.</td>
<td>It’s a kind of car that comes from hospital that take the people who help who need help to the hospital but they couldn’t go by themselves. The ambulance comes and …picks them up.</td>
</tr>
<tr>
<td>BCB</td>
<td>Someone gets sick uh…you get sick and then it’s an emergency they call 911 and the ambulance comes right away to come and get them to the hospital.</td>
<td>Ambulance um works for the hospital when someone is very seriously sick they call the ambulance. It’s also a car. On the ambulance it’s written in reverse order because other cars can see it in the mirror what it is, it becomes reverse in the mirror and there are some equipment in there for breathing and necessary things to take you quickly to the hospital to do something with you.</td>
</tr>
</tbody>
</table>

Note: BCB = Bilingual Content-Based; BHL = Bilingual Heritage Language; MES = Monolingual English-Speaking. Underlined parts= refer to Syntax; Bold type= refer to Superordinate; Italic words= refer to Definitional Features

7. At a younger age, children may refer to “clock” as “that thing on the wall” which shows a sensory/physical relation between the object (the clock on the wall) and the word ‘clock’. This kind of definition does not fulfill the abstract and decontextualized definition expected from the child in school.
only the BHL child produced the real superordinate term for ‘ambulance’ in English (i.e., means of transportation) with a restrictive syntax at the very beginning. In comparison, the BCB child provided no superordinate, even lacking the standard syntax format in the English definition. The MES child was not able to give the real superordinate and the definition also lacked well-formed syntactic properties. In addition, being a rather lengthy definition, it contains primarily syntagmatic relations (the rest of the definition is not reported in the table). Looking at the Farsi definitions, the BHL child’s definition is similar to the English one but misses the real superordinate and the sophistication of the English production. The BCB child’s definition has slightly better quality than the English one but still lacks the real superordinate; it is long and includes much syntagmatic information.

Table 3 illustrates the fact that none of the children could provide the real superordinate term for ‘vegetables’ i.e., plant. Again, the BHL child was able to formulate the best definition compared to the others, however, with a vague superordinate (i.e., something). S/he used similar content in the Farsi definition which could be taken as a sign of transfer. While the BCB child could not provide a quality definition in English in terms of superordinate and syntax, the Farsi definition includes a vague

(Continued from page 29)

Table 3: Excerpts Taken from the Data on English and Farsi Definitions for “Vegetables”

<table>
<thead>
<tr>
<th>Vegetables (English Definition)</th>
<th>Vegetables (Farsi Definition)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MES</strong></td>
<td><strong>N/A</strong></td>
</tr>
<tr>
<td>There are vegetables as the type of <em>like food</em> um there’s like tomatoes and green beans like that they are usually green or yellow and it they’re like food when we can grow them… from seed.</td>
<td></td>
</tr>
<tr>
<td><strong>BHL</strong></td>
<td></td>
</tr>
<tr>
<td>It’s um <strong>something</strong> that you can eat and they don’t usually have seeds in them or anything. You can <strong>grow</strong> them and they can come in all <strong>different shapes and sizes</strong> and um they taste <strong>good</strong>!</td>
<td>Vegetables um you can make them let them <strong>grow</strong> out of water some <strong>grow</strong> from ground usually then you can <strong>eat</strong> them… it is one of the <strong>things</strong> that you must <strong>always eat</strong> to have a healthy body um…they don’t have <strong>pits</strong> like fruits and they can be in different <strong>colors</strong> and different <strong>shapes</strong> long or flat.</td>
</tr>
<tr>
<td><strong>BCB</strong></td>
<td></td>
</tr>
<tr>
<td>Vegetables are <strong>healthy</strong> and <em>vegetables…grow in the garden or field and…for example carrots or broccoli.</em></td>
<td>vegetable is <strong>something</strong> that people <strong>must eat</strong> it’s good for them because um they stay <strong>HEALTHY</strong> and they must <strong>eat</strong> it everyday. Vegetables is something we <strong>grow</strong> in the ground and when it’s <strong>ripe</strong> we pick it and wash it and eat.</td>
</tr>
</tbody>
</table>

Note: **BCB** = Bilingual Content-Based; **BHL** = Bilingual Heritage Language; **MES** = Monolingual English-Speaking. Underlined parts= refer to Syntax; Bold type= refer to Superordinate; *Italic words* = refer to Definitional Features; **Uppercase**= switching to English (Continued on page 31)
superordinate and standard syntax. For the word ‘healthy’, the child switched to English. This code-switching behaviour was observed in many Farsi definitions of the BCBs, especially for superordinate production. Finally, the MES child was not successful with the syntactic form but could refer to ‘type of food’ as a subordinate paradigmatic relation. The above examples illustrate the fact that school-age children, regardless of their language background, need explicit instruction through techniques and guidelines that would help them notice, retrieve and apply the required information and format to such a decontextualized task.

To sum up, the findings of the study described in this paper are in line with those of previous studies on children’s lexical depth presented earlier and to which I refer back here:

1. **L2 learners show restricted depth of lexical knowledge as measured by their definitions of words/concepts:** While the definitions of the BCB group support this notion, it is not applicable to the BHL group’s production. The BHL group may have had higher production abilities because of the advantage of having more L2 (academic) input which might also have been transferred into their L1; moreover, there might have been a two-way transfer of lexical knowledge between the L1 and L2. This is supported by the correlational analyses regarding the L1/L2 schooling years and LOR, suggesting that for all the bilingual samples, more years of L2 schooling and LOR led to higher scores in all L2 measures of implicit and expressible deep word knowledge; however, L1 schooling did not promote the same knowledge/skills in L1.

2. **Larger L1 (or L2) vocabulary size may not correlate with vocabulary depth:** in fact, the larger vocabulary size of the BCB group (with a direct relation to their proficiency) in Farsi had no impact on their Farsi definitional performance. Similarly, Ordonez et al. (2002) reported that the Spanish-English bilinguals in their sample with a large Spanish vocabulary size were not able to perform well on the measures of lexical depth in English.

3. **Insufficient depth of vocabulary knowledge, if not diagnosed by assessment, can create academic gaps which may widen between L2 learners and native speakers:** deep lexical knowledge as an underlying aspect of vocabulary is not always immediately perceptible and can be hidden behind other language skills/knowledge such as the size of one’s vocabulary or one’s oral/communicative proficiency. The findings of the present study revealed lexical depth differences between the BCB group and their bilingual and monolingual peers in spite of the similar level of L2 proficiency among all groups. Therefore, without accurate and sensitive measurement tools, it may not be possible to first, identify L2 children’s insufficient knowledge of the lexical depth, and secondly, fill the gaps in terms of instruction and teaching material. The review of the relevant literature also shows that in the studies by Verhallen and Schoonen (1993; 1998a) and Carlo et al. (2004), the use of lexical depth assessment tools helped the researchers to identify large differences in the lexical knowledge of L2 learner children and their native-speaking peers. In Verhallen and Schoonen’s (1993, 1998) sample, the gaps widened between groups by age and school grade due to a lack of early assessment and instructional support.

4. **Explicit instruction or even intervention programs are needed to expand the lexical depth in content-based curricula:** The (widening) gaps men-

(Continued from page 30)
tioned above can have predictive value for the BCB group or other populations of L2 learners who might be at a disadvantage in terms of developing their L2 academic skills within a shorter L2 schooling experience due to immigration (Cummins, 1981; Harklau, 1994), or lack of instructional support (Verhallen & Schoonen, 1998a) in the curricula. Carlo et al.’s study is a successful example of implementing a vocabulary intervention program for the Hispanic children under study that eventually reduced some of the observed lexical gaps.

Relating the Research to Pedagogy

In teaching L2 vocabulary, instructors may confront a dilemma: the compromise between teaching many words and teaching fewer words in greater depth. Research shows that the latter option as an underlying aspect of vocabulary is in need of explicit instruction.

Similar to L1 vocabulary acquisition, learning unfamiliar L2 words can be the result of many exposures in print. Wide reading as a technique helps learners to have more exposure to and recycle the less frequent words. However, this technique involves implicit or incidental learning of vocabulary. For explicit learning/teaching, as Schmitt (2000) suggests, learning activities should allow learners to expand their word knowledge so that they can gradually add more information about the words in a vocabulary notebook: multiple meanings of a word, pronunciation/spelling, definition, synonym/antonym, etc., (see Appendix 2 for an example of a Vocabulary Card strategy). It is also important that activities introduce and encourage appropriate learner strategies; i.e., guessing and inferencing. In this way, learners would benefit from a combination of explicit teaching and incidental learning (Schmitt, 2000).

The following section offers some general techniques for the instruction of lexical depth aspects applicable to both adult and child English learners. The techniques are extracted from pedagogical materials (Beck, McKeown & Kucan, 2002; Carrasquillo & Rodriguez, 2002; Lively et al., 2003; Schmitt & Schmitt, 2005) and suggest various activities for ‘deep processing’:

- **Semantic mapping:** as a warm-up activity; it primarily allows learners through brainstorming and discussions to bring their prior knowledge to the task from L1 or L2 by filling in a semantic web/map of related associations for a concept (e.g., ‘atmosphere’ as a science class concept and ‘panic’ for adult ESL). In this way, learners can generate and expand their knowledge of concepts. Semantic maps can be utilized to clarify the relevant context of a new science lesson (related to atmosphere-related concepts) or a topic/theme-based lesson (related to the concept of panic) in an adult ESL class.

- **Definitions:** through various guessing games, match/sort games or dictionary use, learners become sensitive to category memberships as well as the conventional form of definitions. As noted in this paper, category membership (superordination) needs to be learned again in another language. Adult ESL learners benefit from such

“...instructors may confront a dilemma: the compromise between teaching many words and teaching fewer words in greater depth...”
activities to build on their knowledge of (multiple) word meanings and dictionary skills.

- **Related words:** through a debate activity, learners can ask and answer questions about specific concepts (democracy, heritage). In this way, they explore the concept and sort out the relevant meaning relations. The activity promotes a deeper and richer network of associations of words in subject areas for adults as well as children.

- **Synonym/antonym:** this knowledge can be incorporated into other activities to extend the depth of knowledge of word meanings.

- **Structural analysis:** Many learners have incomplete knowledge of all members of a word family. Working on word roots and derivational affixes helps learners in deciphering the meaning of unknown words in reading by promoting guessing. Child learners may look for “little words in big words” (Lively et al. 2003, p. 34).

- **Collocations:** exercises explicitly teaching some of the collocations help develop the collocation intuition. Teachers of adult ESL can use corpora to present collocations in authentic contexts.

- **Using words in different contexts:** creating various activities or exercises that model different contexts for the same words in a unit/lesson would create opportunities to see and use the word in its different conceptual meanings. This also helps the deep processing to take effect through recycling the words.

- **Word substitution:** learners are asked to provide a word that replaces a definition/description e.g., “when ducks walk, they ……” (waddle). This encourages thinking and understanding the concepts better.

- **Cognates:** can be useful in teaching superordinate categories in languages that share cognates (Humano in Spanish and human in English).

**Conclusions**

In spite of the significant role of lexical depth knowledge and its usage, it has been neglected in terms of research, assessment and pedagogy. The findings of the study presented here shed light on two educational areas, pedagogy and measurement. While children may know a word, they may not be able to use or produce it in all its conceptual aspects. Therefore, in terms of pedagogy, there is a need to incorporate various features of the deep lexical knowledge (e.g., semantic hierarchies, paradigmatic relations, and collocations) into vocabulary instruction. In terms of assessment, a few tests/tasks have been developed for measuring deep lexical knowledge. One way of diagnosing a problem is through the development and implementation of sensitive and accurate measurement tools.

A significant finding of this study is that it not only offers a new way of assessing the unexplored implicit as-
pect of deep lexical knowledge, but also contributes to researchers’ understanding of the cognitive processes in children’s mental lexicon. Results of the study highlight the fact that, in the long term, the learning of a heritage language and a second language simultaneously contributes to conditions for additive bilingualism and facilitates the transfer of academic skills.

References


“While children may know a word, they may not be able to use or produce it in all its conceptual aspects.”


(Continued on page 36)


## Appendix 1

### Sample Items:

Instruction: Draw lines to connect the stimulus word in the middle to three other words that *always* relate to that word.

<table>
<thead>
<tr>
<th>WAT 33 Items</th>
<th>WAT 16 Items</th>
<th>WDT Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nose</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgeon</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Subway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violin</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Elephant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bricklayer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equator</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bread</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dentist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Earth</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presenter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Axe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teeth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orchestra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvest</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Duck</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sculptor</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>To write</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>To perform</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rare</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Appendix 2

Sample Strategy for Adult ESL (Schmitt & Schmitt, 2005)
Vocabulary Card for the encountered word ‘HORROR’

Front

Part of speech and pronunciation

HORROR
(n)
/'hɔrər/

Word map

emotion  war

HORROR

accident  death

Word family

-id  (adj.)
-ibly  (adv.)
-ify  (v.)

Collocations

horror movie
horror struck
inspire horror

Back

First language translation of horror
(e.g., in Japanese)

Keyword illustration
(horu=dig)
picture/drawing

Second language definition/synonym

intense fear,
dread

Example sentence/s

The family watched in horror as their house burned.
Abstract

Adolescent ESL literacy learners face a multitude of barriers that often prevent them from finding the educational success that might result in an increase in their literacy levels. This paper describes the evolution of the Bridge Program at Bow Valley College, Calgary, Alberta: a program specifically designed to address the literacy needs of immigrant youth and help them transition onto further educational and workplace opportunities. The paper begins with a look at some of the pertinent issues related to adolescent ESL literacy development; describes the evolution of the Bridge Program at the college, from its inception as a pilot project in 2002 to its present day format; and concludes with an overview of the Bridge Program framework document, Bridging the Gap: Teaching and Transitioning Low Literacy Immigrant Youth (Bow Valley College, 2007). The framework document, researched and written by members of the Bridge team after five years of working with immigrant youth, encapsulates the key elements of a successful transition program for young adult literacy learners who have exited high school but are still in need of focused literacy instruction.

Learning from Research

Twenty-first century society relies heavily on print, and for individuals who lack reading and writing skills, this can result in being faced with significant challenges. The ABC Canada Literacy Foundation (2005), in presenting the findings of the International Adult Literacy and Skills Survey (IALSS), highlighted the personal and economic implications that exist for Canadians relative to low literacy levels. In its report, the Foundation states that 48 per cent of Canadian adults aged 16 or over, around 12 million people, are considered to have low literacy skills. Within this 12 million, 20 per cent score at Level 1, the lowest proficiency level, and 28 per cent at Level 2. For Canadian youth, specifically those aged 16 to 25, the Foundation finds that over one-third of this group have either Level 1 or Level 2 proficiency. To put these figures into perspective, Level 3 is the skill level required for successful secondary school completion and college entry; anyone who does not achieve Level 3 proficiency is deemed to have low literacy. Individuals with Level 2 proficiency are able to deal with printed material that is simple, clearly laid out, and for limited purposes only, and those at Level 1 are often unable to extract any information from printed material.

Turning to Canada’s immigrant population, research shows that around 60 per cent of immigrants in Canada have a low level of literacy in English,

(Continued on page 40)
scoring below Level 3, compared to 37 per cent of native-born Canadians (ABC Canada Literacy Foundation, 2005). According to the 2001 census, approximately 470,000 immigrants aged 15 to 24 live in Canada (Government of Canada, 2006), which means large numbers of young people within this group are failing within the educational system and, as a consequence, face an adult life with inadequate literacy and numeracy skills, and limited employment prospects.

The economic ramifications of low literacy levels are serious. Those with low literacy, at Levels 1 or 2, are about twice as likely to be unemployed compared to those with higher level skills. In addition, they are the group of individuals most at risk of losing their current jobs due to technological or organizational change. They are unlikely to have the skills necessary to cope with the demands of the majority of jobs that will replace those that have been lost (ABC Canada Literacy Foundation, 2005).

Looking to the future, it can be expected that the literacy demands adolescents will face during this century will exceed those required in the past, and since many of these young learners do not have the skills necessary to negotiate the rapidly-developing “Information Age” (Meltzer, Smith & Clark, 2001) successfully, there is a need for reform within the area of literacy instruction. Literacy learners, particularly adolescent ESL literacy learners, face a multitude of barriers that can prevent them from reaching the educational success that would result in an increase in their literacy levels. Some of the main challenges facing this demographic group have been identified by Bridging Refugee Youth & Children’s Services:

- Lack of parents or extended family: This can mean not only a lack of emotional and social support, but also a lack of financial support for school fees, food, rent, etc.

- The need to work and go to school at the same time: This challenge is often made more difficult to cope with when an adolescent is still learning a second language and acting as an interpreter and cultural broker for the family.

- Balancing the demands of two distinct cultures: This may conflict with major life decisions, such as acceptable career paths and lifestyle choices, and the role of family members in these decisions.

- Survivor guilt: This may lead to learners dropping out of school to work so they can send money to family members in refugee camps or their country of origin, sacrificing their own advancement in the long-term to help others in the short-term.

- Interrupted schooling: This experience can make the academic challenges and expectations of regular, formal schooling difficult and frustrating.

- Early pregnancy and parenting: Learners who have experienced this often have significant personal and household responsibilities that influence their educational choices and decisions. (Refugee youth and the transition to adulthood, 2006).

For many immigrant students, barriers to successful learning begin to appear early in their education. Many within this group find the demands of the regular school classroom too great and decide to drop out of the school system altogether. Watt and Roessingh (2001)
found that it is common for ESL learners to drop out of the education system before finishing high school, with studies showing the dropout rate among young ESL learners as considerably higher than that of their native English-speaking peers.

In an attempt to help learners overcome the many barriers to learning and to encourage not only enrolment but retention, programs serving immigrant youth need to incorporate a social support component. Research shows that learners respond positively when they are provided with not only academic, but also social support (Dann-Messier & Kampits, 2004). Many programs appear reluctant to develop a social service capacity and when they do, they often do not fully address the needs of learners. If a program places more importance on its schedule than on its accessibility to learners, it limits its own ability to reach out to learners (Porter, Cuban, Comings & Chase, 2005).

The approach taken in the classroom with learners plays a significant role in the success of an adolescent literacy program. Learner engagement and motivation must become a fundamental element of instruction. If learners are to develop the necessary skills to competently use reading, writing and speaking to learn, they need to be in environments which actively engage them. Research has shown that motivation and engagement play a key role in young adult learners’ development of literacy skills (Meltzer & Hamann, 2004).

A learner-centred classroom is also considered a key component of a successful program. If learners are active participants in the classroom, this will improve not only learner engagement but also learner retention, which in turn, will have a positive effect on overall educational achievement (Weber, 2004). Within this type of classroom, teaching in context is very important. Research suggests that when literacy skills are taught in context, rather than in isolation, learners are more likely to be able to transfer the skills to other areas of their learning (Meltzer et al., 2001). There is also evidence that learning a second language is facilitated when the content of the class is presented in a contextualized form, such as through thematic frameworks (Facella, Rampino & Shea, 2005).

In addition to the above mentioned classroom practices, the explicit teaching of strategies is vital. Research points to a relationship between adolescent literacy development and the frequent, purposeful use of cognitive and metacognitive strategies (Meltzer et al., 2001). There also appears to be a connection between strategy use and motivation. Curtis (2002) notes that “intrinsic motivation seems to predict strategy use, and strategy use increases motivation.” Strategies can be explicitly taught; as well, it is possible to teach those with low reading skills the strategies that better readers use (Meltzer & Hamann, 2005).

A key approach in developing learners’ overall skill sets is to offer project-based learning opportunities. Project-based learning is not only an effective way of teaching, but also a concrete way of preparing learners for entry into the workforce. In a society where employers are actively seeking employees who have interpersonal skills, teamwork skills and problem-solving skills, project-based learning can be a valuable tool to help prepare learners prepare for the modern workplace (Wrigley, 1998).

The way in which instructors interact with the learners in their class is also an essential program component. Instructors have a responsibility to create a classroom where learners feel safe and supported, and where those with different backgrounds and perspectives feel welcome. Such an approach encourages participation and contributes to learner success (Meltzer & Hamann, 2004) and is especially relevant for those with low literacy skills, as many of them have had
negative educational experiences in the past.

As has been demonstrated in this brief literature review, adolescent ESL literacy learners face many challenges and barriers to be successful academically and need relevant, focused instruction and support. Recognising the need for targeted programming for this demographic of learner, the authors began in 2002 at Bow Valley College, Calgary to develop a literacy program specifically for young adult ESL learners.

Evolution of the Bridge Program

During the first year of a three-year pilot project, we conducted a needs assessment to determine the program needs for immigrant youth in Calgary. Following this, we developed an instructional program for young adult literacy learners based on the findings of the needs assessment. This initiative, called the Young Adult ESL Literacy Program, continued until 2005. In 2005, the Young Adult ESL Literacy Program became the Bridge Program, working in partnership with the Calgary Separate School District to identify learners at the high school level who would benefit from our program and transitioning them to other opportunities when appropriate. The Bridge Program, funded by Alberta Advanced Education and Technology, has continued to run successfully at Bow Valley College since that time.

Since the inception of the Young Adult Literacy Program, we have focused on being responsive to learners’ needs. We regularly scrutinise our practices and solicit feedback from learners and instructors. During the last five years, we have undertaken comprehensive analyses of every aspect of our program and have made changes to serve our learners better. These changes have included modifying program outcomes, re-scheduling classes, creating new learner assessments, developing new curriculum content, and adapting the roles of those providing social support to learners; i.e., student advisers and student support workers.

We have seen the Bridge Program grow and develop to meet the needs of learners. At present, enrolment in the program is at an all-time high; we feel this is both a reflection of the work we have done to improve our program as well as an indication of the need for such programs. Early in 2007 we began another partnership with Lethbridge College in Alberta to pilot our program framework document, which had been researched and written by members of the Bridge team in Calgary. This document, Bridging the Gap: Teaching and Transitioning Low Literacy Immigrant Youth (Bow Valley College, 2007), is a practical tool that has been made available to other educational institutions wishing to implement their own transition programs. The framework offers the opportunity to learn about best practices for transition programs for young adult ESL learners and guidelines on how to apply these practices to individual settings and target audiences. The transition program in Lethbridge, now operating within our framework guidelines, is called Youth in Transition and serves young adult literacy learners in and around the Lethbridge area.

The Three Stages of the Bridge Program

The Bridge Program framework document contains guidance on planning and implementing a transition program in three stages: Identify and Recruit Learners; Support and Retain Learners; and Teach and Transition Learners. The content of these sections has drawn on the experience of the Bridge instructional and administrative teams at Bow Valley College based on their work with immigrant youth. What follows is a brief overview of each of the three stages.

(Continued on page 43)
Stage One: Identify and Recruit Learners

Transition programs are not easy to build, and learners who fit transition programs are not always easy to find. Recruiting learners can be challenging, especially if they have dropped out of educational institutions or given up on the system. This first stage of the program involves the following:

Define Literacy

For many people, there is an assumption that a literacy program is one which teaches basic reading and writing skills. While this is certainly characteristic of many literacy programs, a transition program to help young adults improve their literacy skills and facilitate access to further education must extend to beyond what most people think literacy instruction can be or can achieve. The focus of a transition program should be to offer a structured and supportive learning environment in which to build on and develop the many and varied skills that learners bring with them to the classroom. Ultimately, in a transition program, literacy means capacity building. Transition programs for literacy learners build capacity in learners by giving them the support and guidance they need in their studies, while at the same time building their confidence and encouraging them to become independent both as learners and as individuals.

Identify Programming Needs

Identifying programming needs is a good investment of time as it promotes a better knowledge of the target audience and the barriers they face. It also allows the program supports and academic requirements of the learners to be determined. This then facilitates the creation of a unique program that fills a niche in the community while avoiding duplication of what is already available.

Identify Target Audience

A program needs a specific target audience and it must shape itself to fit the needs of that audience. Without a clear target audience in mind, it is impossible for a program to focus on what it must do to serve the learners in the program. Successful literacy transition programs must choose their target audience carefully and ensure this audience is given all the support and encouragement necessary to succeed. For programs to be successful, program developers must be very clear from the outset about their target group. The boundaries of a program may need to be flexible, but there must remain a clear vision of who the target group is and why.

Set Expectations

Transition programs should have rigorous expectations for learners. They must expect learners to move to a point where they can accomplish specific outcomes. For example, to transition on to further education, learners must not only write, but write on topic, and they must be able to follow instructions. Of course, depending on the level of learners, the time and support it takes to meet these expectations will vary. Transition programs must set high expectations for their learners, be clear about those expectations, and be accountable for bringing learners to that level.

Recruit Learners

When working with young adult literacy learners, transition programs must pay special attention to recruitment because these learners are already at a high risk of dropping out of the educational system. Transition programs must make sure they reach out to learners, and
learners need easy access to their programs. To achieve this, recruitment must be viewed as an ongoing, long-term process. Recruitment to a transition program is about reaching out to possible learners, at times before they are even ready to begin a program, and always being conscious that many within this demographic may not feel connected to or valued by the education system.

Stage Two: Support and Retain Learners

We have found that much of our learners’ ability to stay in school and succeed can depend upon whether or not they get the academic and social support they need to manage and overcome their barriers. This second stage of the program involves the following:

Identify Barriers and Needed Support

Young adults who have low literacy skills and who are learning English as another language can face many barriers to participation in post-secondary school programming. These barriers often prevent learners from accessing or fully participating in the programs they need. Learners may face financial, legal, health, social, emotional and employment issues. They may also face language and cultural concerns, family and personal problems, educational processes and bureaucracies that are difficult to navigate, plus schedules and procedures that can be daunting and unmanageable. Transition programs serving this demographic need to be more than just sensitive to the potential barriers: they need to be diligent and proactive in helping learners recognize issues, access resources, manage processes, understand conditions of support, anticipate issues, and in planning for independent navigation of the services they need in the future.

Build In Academic Support

Academic support can come in many forms but is best provided through a student adviser who meets with learners individually and in small groups to offer support and guidance in matters related to academic achievement. Student advisers help learners understand academic requirements and help them navigate the educational system. They help learners set short- and long-term goals and work with learners to develop career plans, explore the various pathways to those careers, and understand both the opportunities and challenges that lie ahead of them.

Build In Social Support

Student support workers can provide the social support important to this demographic group. They assist learners in dealing with social and personal issues such as finding a place to live, arranging child care, accessing health care services, securing suitable employment, and managing work schedules to fit with school. They also provide referral services to help learners to access counselling and other community-based services that they need. Although these issues may seem somewhat removed from academic concerns, they have a strong effect on learners’ ability to stay in school and to succeed.

Help Learners Overcome Barriers

Ultimately, a transition program designed for young adult literacy learners must support its participants in ways that may not be considered traditional. Support must come in the form of a team concerned with the educational needs of the learners as well as their overall welfare. Without this, it is all too easy for these at-risk learners to become overwhelmed by their life challenges and miss out on the opportunities the program offers to help them reach their educational and career goals. While in the program, learners should receive the

“Learners may face financial, legal, health, social, emotional and employment issues.”
guidance they need to deal with the issues that put them at risk, be coached in ways that promote independence and self-reliance, and be provided with an environment that will encourage them to prepare for the future. Within this process, learners should also be given some form of responsibility for solving their problems. The process of helping learners find solutions to their problems should always be a partnership as this arrangement allows learners to feel in control of their lives while receiving the advice and guidance they need.

Stage Three: Teach and Transition Learners

A transition program must focus on what learners need to know to succeed in the next stage of their educational journey. Language and academic skills are critical, but learners need more than that to transition successfully. This third stage of the program involves the following:

Build an Effective Curriculum

There are several elements to an effective transition program curriculum. First, the curriculum should be built on outcomes. Outcomes provide a program with structure and balance and help learners to see not only what is expected from the program, but also what they can achieve during their studies. Outcomes bring accountability: instructors become accountable to learners and program administrators for delivering a course based on program-specific outcomes. As a result, the program becomes accountable to all interested parties for ensuring it remains true to the stated outcomes.

Young adult learners respond to practical and relevant learning experiences; therefore, teaching in context is an important element. Thematic units provide outcome-based contexts for learning by using real-world, high interest, age-appropriate content. They focus on helping learners to achieve specific reading, writing, and learning strategy outcomes through a variety of authentic learning tasks.

The teaching of strategies is another key curriculum component. It helps learners become more successful in reading, writing, language learning, and test-taking. Strategies also help learners to become more effective language users and learners both inside and outside the classroom. In addition, skilful use of strategies will help them prepare for the demands of post-literacy study.

Both the workplace and post-secondary learning environments are increasingly focusing on essential skills. These are the foundational skills that individuals need to help themselves learn, work, and manage change in their lives. Low literacy immigrant youth, who face many years of work — and learning — to adapt to change in the workplace, need these skills; consequently, they should be incorporated into the curriculum. This can be done through a project-based learning component, which helps learners develop the skills necessary for successful participation in the North American workplace and in academic contexts.

Ensure Quality Instruction

Learners in transition programs need instruction that is direct and explicit to help them understand exactly what is being learned, why it is being learned, and how it will help them. The goals and expectations of a lesson must be clearly understood by everyone. If learners are taught with clear expectations and focus, and they are given "real-world" tasks to complete for a "real" reason, then engagement, motivation, and success are more likely to follow.

Focus on Assessment

Assessment is an essential part of program planning and delivery. As-
assessment should take the form of a continuous gathering of relevant information on a daily and term basis to meet the following objectives: understand learners and their needs; report learner progress; guide and improve instruction; and, finally, improve overall learning in the classroom.

Help Learners Move On

Learners must be given appropriate advice to help them navigate their way through the education process and to achieve their goals. The student adviser should play a major role in this process, supporting and guiding learners as they plan the steps they need to take to achieve both short and long-term goals. The student adviser can also help learners make the transition from a high school learning environment to one in which learners are expected to become independent and proactive in decisions relating to their education in particular, and their lives in general.

Conclusions

Our experience with this demographic group has shown us that ESL literacy learners need post-secondary learning opportunities that offer more exposure to the English language, more focused attention on reading and writing, more deliberate vocabulary building, and more direct instruction in learning strategies and essential skills. Young adult ESL literacy learners struggle to transition from their familiar high school contexts to further education or employment opportunities due to a fear of the unknown, a lack of coping strategies, and an inability to access available resources. These learners need access to programs that concentrate on the development of skills and strategies to allow them access to further educational or employment opportunities.

As we have already discussed, there are thousands of Canadians with literacy skills too low to succeed in today’s labour market. Given the scale of these numbers, and the serious personal, social, and economic ramifications of low literacy skills, we strongly believe that there is a need for transition programs such as ours, which will serve many of the next generation of Canadian citizens. The number of individuals in the target group we work with is growing; for them to become productive members of society and attain some level of personal satisfaction in their lives, their learning needs must be addressed in an effective manner.

References


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Abstract

The following paper reports on a year-long ethnography of two kindergarten and two grade one classrooms which examined gaps in the provision of appropriate education for CLD children. The paper specifically explores the relationship between literacy and identity through narratives created by data collected during field work. The author discusses the ways in which students were positioned as a result of literacy curricula they encountered. Pedagogical implications are drawn from the analysis and a frame is offered to help conceptualize literacy instruction that is responsive to CLD student’s cultural and linguistic needs and assets.

The area of English as a Subsequent Language (ESL) has become increasingly affected by the global and local ramifications of international economic restructuring. Globally, one effect has been increased mobility of labour markets and cross-cultural contact (Burbules & Torres, 2000; Cummins, 2005), resulting in currently 375 million ESL learners worldwide (Beale, 2007). Locally, students in North American elementary schools are more culturally and linguistically diverse than they have ever been (Obiakor, 2001). Within the Canadian context, a large number of children in elementary schools located in urban centers speak a first language (L1) other than English or French (Citizenship & Immigration Canada, 2003; Roberts-Fiati, 1997). Ontario has experienced a 29 per cent increase of ESL students within elementary schools since 2000 (People for Education, 2007). Further, the population of Ontario is expected to grow from roughly 12 million in 2001 to 16 million in 2028, with 75 per cent of this growth coming from immigration (Glaze, 2007). Despite these demographics, educational researchers have noted a dearth of research about culturally and linguistically diverse (CLD) students in early childhood education (ECE) and disparity in providing for these students (Bernhard, Lefebvre, Chud, & Lang, 1995; Falconer & Byrnes, 2003; Suárez-Orozco, 2001; Toohey, 2000). Further, the limited scholarship about young children who are ESL learners has traditionally been methods-focussed with very little arising from sociocultural and critical perspectives (Toohey, 2000). In contrast, this study contributes to the more recent and growing body of work in early years literacy research grounded in sociocultural theory as it informs early literacy (Bourne, 2001; Boyd & Brock, 2004; Gee, 2001). In addition, it draws on critical multiculturalism (Kincheloe & Steinburg, 1997; Ladson-Billings, 2004; May, 1999; McLaren, 1994) as an analytic lens.

As described in previous studies (Iannacci, 2005; Heydon & Iannacci, 2006),
two basic tenets of sociocultural theory highlight its relevance and applicability to this research. The first tenet is that “the mind is social in nature” (Wertsch, in Boyd & Brock, 2004, p. 4). The second tenet is that “language in use plays a central role in mediating our actions as humans. Consequently, the uses of language in the context of interactions, and the various analytical ways of looking at that language, become central when considering human learning” (p. 4). Literacy is conceptualized as a social practice and being socially mediated. As such, coming to literacy is not exclusively about the acquisition of a code, but also, and more importantly, a culture. Classroom literacy practices, therefore, can be understood as a particular set of cultural events. It is important to critically examine what students appropriate as they encounter school literacy as well as the impact this appropriation has on their identities. To this end, critical multiculturalism further informs an analysis of the literacy practices and events encountered by CLD students in their elementary school classrooms. In addition, it allows for an examination of what they appropriated as well as the impact this appropriation had on their identities.

Critical multiculturalism, as it relates to education, is influenced by critical pedagogy which “is the term used to describe what emerges when critical theory encounters education” (Kincheloe & Steinburg, 1997, p. 24). Critical theory is “especially concerned with how domination takes place, the way human relations are shaped in the workplace, the schools and everyday life” (p. 23). As such, critical pedagogy examines pedagogy as a cultural practice that produces rather than merely transmits knowledge within uneven relations of power, which informs teacher-student relations (Sleeter and Bernal, 2004). The influence of critical pedagogy has helped link multicultural education with wider socio-economic and political inequality. This link has traditionally been absent from discussions about and conceptualizations of multiculturalism and multicultural education (May, 1999).

The aforementioned framing informs the year-long ethnography (Iannacci, 2005) this paper reports on. The study addresses gaps in the provision of appropriate education for CLD children in two kindergarten and two grade one classrooms by examining the following guiding questions:

1. What are the literacy practices and events CLD students encounter within early years classrooms?
2. In what ways does this “lived” curriculum facilitate and constrain cultural and linguistic assimilation and acculturation as CLD students acquire ESL?
3. What part does literacy curriculum play in the negotiation of their identities?

The study uses Critical Narrative Research (CNR) as an expression of ethnography to address these key questions. CNR is an emerging genre that frequently crosses boundaries of a variety of theoretical orientations and borrows from ethnographic traditions while aware of its colonial underpinnings (Clair, 2003). CNR research is concerned with culture, language and participation as issues of power in need of critique with the intent of change in the direction of social justice (Moss, 2004).

Data collection consisted of two phases of observation in four early years classrooms in two schools throughout a school year. During both phases of the research, the researcher engaged in “overt participant observation” (Wallen & Fraenkel, 2001, p. 436) and ensured… **Classroom literacy experiences... can be understood as a particular set of cultural events.**
that research subjects knew that they were being observed. Once university, school board, principal and teacher approvals and permissions to conduct research were granted and secured, preliminary briefing sessions with students took place. The briefing introduced the researcher and made explicit the researcher’s role within the classroom and clarified the information and permission form/letter students took home to their parent(s)/guardian(s). The letters clearly stated the nature of the research as well as the role of the researcher. Letters and permission forms were written in the CLD students’ first language to ensure that their parents fully understood the study. The documents were translated into Albanian, Arabic, Serbo-Croatian, Spanish and Turkish. All the remaining students in the classrooms received letters in English to inform their parents/guardians of the researcher’s presence and role within their child’s classroom as well as the nature of the study.

During fieldwork, school documents, field notes, photographs and children’s work were collected. Interviews with teachers, parents, school board personnel and students were also conducted throughout the year. These multiple forms of data were used to construct narratives that were then deconstructed through reflection about and a distancing from the relations of power that informed what was observed. Literacy events, practices, themes and salient issues that emerged from the narratives were discussed after they had been contextualized and interrogated for inconsistencies and contradictions. Reconceptualised understandings about the data were subsequently developed as a result of this threefold mimesis (Ricoeur, 1992). This analytic-interpretive process that began with the archiving, sorting, development, and re-reading of field texts (Clandinin & Connelly, 2000) allowed for the juxtaposition and identifying of similarities and/or contrasts within data which subsequently revealed patterns, themes, narrative threads, and tensions. Data relevant to key issues being examined in this paper from the larger study are presented as a way of demonstrating and exploring these issues.

One of the issues that emerged as the guiding questions were explored was the various identity options (Cummins, 2005) made available to students as a result of the ways in which literacy curricula were organized and how they performed within the context of mainstream and ESL early years classrooms. Recent theorizing has confirmed the need to understand identity as being formed in socio-political, socio-cultural contexts where a dominant group often persists both structurally and culturally. Cummins (2001) therefore argues that “interactions between educators and students always entail a process of negotiating identities” (p. viii), and that this process “recognizes the agency of culturally diverse students and communities in resisting devaluation and in affirming their basic human rights, but it also focuses on the fact that identities develop in a social context” (p. viii). This notion of socially constructed identity formation is commensurate with Hall’s assertion that, “identity is not a fixed essence at all, lying unchanged outside history and culture. It is not some universal and transcendental spirit inside us on which history has made no fundamental mark...Not an essence but a positioning” (Toohey, 2000, p. 8). Toohey adds that understanding identity as a positioning highlights the social construction and politics of position. Identity is therefore unstable and constructed in specific interactions informed by relations of power. Understanding issues regarding identity is particularly relevant to this study since acquiring literacy is inextricably connected to identity formation, a notion especially manifest in the microcosm of the classroom. Gee
(1990) argues that literacy acquisition is a form of socialization and as such, becoming school literate means a change in identity. Since this study concerns itself with the ways in which CLD students experience literacy in schools, analytic tools and concepts that help to examine the sets of values and norms schools transmit to students as they join the literacy club (Smith, 1988), and the degree to which their identity is influenced by this process are important to explore.

A great deal of the ethnographic data I collected demonstrated the ways in which students learning ESL continually negotiated how they were positioned within their classrooms (both ESL and mainstream) as a result of literacy curricula they experienced. Literacy practices and events that comprised literacy curricula both extended and constrained the various identity options made available to them in ways that at times responded to, and at other times negated their cultural and linguistic assets. The following narratives constructed from data demonstrate how research participants experienced and negotiated this duality and the dynamics of power that informed who they were allowed to be within the context of their classrooms. The pedagogical and identity-focussed implications of these narratives are further discussed after they have been presented.

Ines and ‘f’ Day

Ines attended senior kindergarten at Elmwood after arriving in Canada in February of 2002 from Argentina. She began receiving ESL support at the beginning of her grade one year. Most of her verbal utterances were in English but she would code switch into Spanish when she did not know the English word (e.g. *gelido* for icy) or to demonstrate her ability to speak her first language. Such switches were at first very rare for Ines to make in the regular classroom where most of her energy was focused on fulfilling Connie’s expectations (her grade one teacher). To this end, Ines often engaged in procedural display by mirroring and mimicking what other students were doing, being aware of and attentive to what was happening in the classroom and trying to appear as if she understood everything. It was clear from observing and working with her that conditions within the classroom did not always enable this to happen as the following incident constructed from field notes demonstrates.

As per routine, the grade one students are called to the carpet to review the October verse of Maurice Sendak’s *Chicken Soup With Rice*. They have read and re-read the poem numerous times throughout the month. Connie covers all but the first letter in certain words in the poem and then asks students if they know what the word is. I pay special attention to Ines during this oral cloze lesson.

Throughout the review of *Chicken Soup With Rice*, Ines echoes sounds similar to those her classmates utter when they are asked to repeat a correct word in unison (e.g. Chhhhhhhhhhucken). She does not volunteer an answer throughout the lesson.

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1. Names of students, teachers and schools are pseudonyms.

2. A common strategy many CLD students use when discursive conditions within their classrooms render communication fragmented, abstract, culturally loaded, and incomprehensible; see Iannacci, 2007.
At one point Connie assumes she has an answer to offer because she sees her echo the beginning sounds of a correct response and asks her to think about the new word she has covered. Ines looks at her intently. Her tiny hands dig deep in her lap and start to fold into one another. The class becomes very quiet. Ines’ tongue shifts from her left cheek to her right several times. Connie repeats the question and prompts her toward an answer. She provides more and more of the word until she finally uncovers all of it and provides her with the correct answer. The entire class repeats it and Ines' hands and tongue stop their nervous dancing.

Connie then delivers a phonics lesson. She is following the prescribed Jolly Phonics lesson schedule, so today is ‘f’ day. The pedagogical trajectory is always the same. It begins with an introduction of the letter and the sound the letter makes as well as an action that corresponds. Items beginning with the letter/sound being focused on are identified and students are then asked to find independently items that begin with this letter/sound. Connie explains that students are to find and circle pictures on a sheet that begin with ‘f’ and ignore pictures of other things. Items included a football, an American flag and someone playing golf. Before distributing the sheet, she asks questions about the pictures to prepare students for the task. Although she gives clues about the football, no one answers and Ines sits quietly diverting her eyes away from Connie.

Despite Connie’s descriptions of the items on the seatwork sheet, both Ines and another ESL student have difficulty determining items that begin with ‘f’ as they attempt to complete the worksheet at their desks. At one point, Ines points to the American flag and quizzically asks, “Flag?” I assure her that it is a flag, an American one with the same shape but a different look than the Canadian flag hanging in the classroom. I have a difficult time explaining the golf picture, since I’ve never golfed either. From time to time, Ines names an item in Spanish “flores – flower, dedo- finger.” I listen to her and elicit Spanish responses from her about pictures on the sheet. We compare and contrast them with English words for the same items. Sometimes they both begin with /l/, sometimes they do not. Eventually we complete the worksheet, correctly identifying ‘f’ items and leaving the others. The class stops at this point for recess.

After recess Connie asks the students to return to the carpet where she has prepared a sheet with Halloween-themed pictures (goblin, jack-o-lantern, ghost, bat, witch, black cat). She invites the students to first color the pictures then find the sentence to match the picture using a prepared chart. She demonstrates, “This is a black cat. Where does it say black cat on the chart?” After she sends the students to task, I continue working with Ines. Since Connie encourages “good grade one coloring” and “not coloring out of the lines,” it is a while before Ines can begin the matching exercise. Since she is familiar with and can only name two of the items on the sheet, I once again try to explain what each of the items is.

Ines attended ESL sessions with Michelle (the ESL teacher) and her participation during these sessions was qualitatively and quantitatively quite different than during whole class instruction in the regular grade one class. Michelle’s encouragement of first language use seemed to foster a comfort level that allowed for Ines’ codeswitching. Interestingly, after an ESL class in which incidents from the following “uno, dos, tres, cuatro” narrative took place, I noticed Ines beginning to teach her grade one classmates Spanish when the opportunity presented itself in her regular classroom. For example, as I read the regular class two Spanish and English bilingual books, Hairs/Pelitos by Sandra Cisneros (1994) and Taking a Walk/Caminando by
Rebecca Emberley (1990), Ines sat in a chair right beside me in front of the class and happily translated words and sentences within the book into Spanish as her classmates repeated them (e.g., school/escuela). Throughout the year, some of her classmates would repeat words she taught them. I asked her how she felt about this after observing such an incident. She beamed and said, “It makes me happy.” Ines enjoyed the bilingual books so much that she asked me for her very own copies. I provided her with the books and later, when I asked her if she was enjoying them she said, “I’m reading with mom. I learn to read in English and Spanish. It’s good. I read with my sister first in Spanish, then in English. My mom says it’s good.” Ines also asked me for more letters in Spanish similar to the one I had sent home with her asking her parents for permission to include her in my study.

Uno, Dos, Tres, Cuatro

Michelle comes to the door to pick up Ines and other students learning ESL. She greets all of them and then looks directly at Ines who is standing at the front of the line and says, “Hola.” Ines smiles back at her and cheerfully responds, “Hola.”

Michelle asks Ines if she would like to count all the children in Spanish to make sure everyone is present. Ines agrees and counts, “uno, dos, tres, cuatro” as we make our way to the ESL room. Michelle echoes Ines, tells her she is taking Spanish lessons, and asks for her help in learning the language. She then asks other students if they would like to count their peers in their first language as we walk toward the ESL room.

Today is ‘e’ day and Michelle delivers a lesson on short and long /e/ and on how to print letter ‘e’ by using a 8½ x 11 visual text that includes items that begin with the letter ‘e’. She asks the students to formulate an oral narrative of what is happening in the visual text. At the end of the lesson Michelle asks the students to think of words that begin with ‘e’ and opens a picture dictionary to the ‘e’ page to aid them. Ines looks at the pictures carefully, but does not respond. Michelle points to a picture of an egg and says, “What’s this?” Ines pauses thoughtfully and says, “huevo.” Michelle affirms her answer and adds, “Oh, in Spanish this is a huevo. In English it’s called an egg.” Ines repeats “egg.” Michelle asks her what letter it starts with and Ines replies “e.” Michelle then takes a piece of paper and draws a picture of an egg and writes the letter ‘e’ under it. She then asks the students what letters should follow, and with their collective help continues to label her egg illustration. She then tells the students they will also be drawing and labelling pictures of things that begin with ‘e.’ She provides each of them with a picture dictionary to help with the task.

As I begin working with Ines she points to an elephant and says, “elefante.” I repeat what she has taught me and point out how similar the word is in English—elephant. She draws a picture of an elephant and as she finishes its ears, Michelle points to her picture and says, “This begins with ‘e’ as well and you have two of them.” Michelle tugs on her own ear lobe to give Ines a clue. Ines says, “oreja” and we both affirm her response. Michelle adds, “In English it’s called an ear.” She then writes the word “ear” on Ines’ sheet with an arrow pointing toward the ears on the elephant Ines has drawn. Ines then points to the tusk on the elephant picture and says, “colmillo.” Once again, I greet her response positively and repeat the word in English for her. Ines’ friend Janna is seated next to her and is listening intently as she draws and labels ‘e’ items from the picture dictionary. Eventually she also begins to name items in Albanian and then English. Occasionally she...
thinks of other 'e' words in English on her own and then names them in Albanian.

Once the session is over, we escort the students back to the grade one classroom. I have a brief discussion with Michelle about what occurred and her willingness to let students code switch into their first languages. Michelle believes that it is "fair enough" to do so because they are learning English. She also recognizes that some of them have fairly well developed skills in both languages and wants to draw on that.

I enter the classroom as the students prepare for snack and then recess. I open my notebook and begin recording what has just transpired. Ines wanders over to me and asks what I am writing. She asks me if she can write in my notebook. I hand it to her and she draws a picture of a man. I ask her who it is and she replies, "You." Underneath the picture she writes, "Man" and "ombrá." The text she creates mirrors the bilingual books we have read together.

Discussion

Literacy practices and events illustrated in the "Ines and 'f' Day" and "Uno, Dos, Tres, Cuatro" narratives both neglected and accessed students funds of knowledge (Moll, 1992) and, as such, facilitated and constrained identity options (Cummins, 2005) made available to students. One of the most prevalent ways in which CLD students were positioned as deficient was by an unquestioned "monolingual habitus" (Bourne, 2001, p. 108) or accepted common sense about the dominance of English. The lack of attention first languages received (e.g., in Ines' mainstream classroom) mirrored the governing texts that shaped literacy instruction within the classrooms, namely the Ontario Language Curricu-

(Continued from page 53)

lum, Grades 1-8 (1997) and The Kindergarten Program, (1998). Both documents reflect an unquestioned dominance of English as the world's language (the language of globalization) as they do not address the ways in which first languages are to be understood or incorporated within literacy curricula. Rather, the documents explicate the role of the school as exclusively assistive to the ESL learning process. The dynamic was evidenced in the "Ines and 'f' day" narrative and corroborates Bourne's (2001) findings which demonstrate that despite large multi-ethnic populations, English is often assumed to be the language of literacy within schools, thus rendering language an invisible issue, which allows schools to function as if the mother tongue of all children is English. The lack of attention paid to accessing and

(Continued on page 55)
capitalizing on students’ L1 in most of the classrooms I observed, and the marginal role students’ L1 occupied in the classrooms, consistently demonstrated this monolingual habitus and the subsequent limiting of CLD students’ identity within the context of the classroom as deficient. Ironically, the re-assertion of English as privileged linguistic capital and the reigning language of globalization occurred in classrooms that had never been as culturally or linguistically diverse or more reflective of the growing global mobility emblematic of globalization. Within this context, first languages were at best dealt with ambivalently and complacently and at worst, viewed anxiously and treated as impediments toward the achievement of monolingual literacy curricula. This is especially important to consider when we specifically examine the extent of language loss in the Canadian context. Helms-Park (2000) reminds us that

...some researchers predict that intergenerational loss of ethnic groups’ languages in Canada... will culminate in complete or near complete linguistic assimilation among all but newly arrived immigrant groups. Language attrition in the second and third generations among ethnic groups is undoubtedly a reality in Canada, as is indicated by analyses of census and survey data. (p. 128)

CLD students such as Ines (as demonstrated during the “Ines and ‘f’ Day” narrative) were further rendered deficient by the ways in which the language and culture load of the literacy events they experienced created barriers to meaningful instruction (Meyer, 2000). The fragmented and isolated presentation of language expected to be understood and used by CLD students during instruction meant that opportunities for exposure to context-embedded communication were diminished. Context-embedded communication occurs when “participants can actively negotiate meaning (e.g., by indicating when a message has not been understood) and the language use is supported by a wide range of meaningful interpersonal and situational cues” (Cummins, 2001, p. 67). Opportunities to negotiate learning, relationships and identities were greatly diminished during literacy events that employed context-reduced communication, which

...relies primarily on linguistic cues to meaning. In these situations, successful interpretation of the message depends heavily both on students’ background knowledge and on their knowledge of the specific vocabulary, grammar, and discourse conventions that express the meaning of the message” (Cummins, 2001 p. 67).

These literacy events did not permit CLD students such as Ines to negotiate interaction in their regular classroom and their reliance on linguistic cues and discourse conventions in English prohibited them from being able to successfully participate and/or independently complete assigned work. Additionally, some of the items featured in the tasks students were asked to complete were culturally specific and took for granted students' background knowledge (e.g., golf illustration, Halloween themed items etc.). Without understanding the items, students like Ines could not name them, let alone isolate sounds within their name or complete assigned tasks independently. In these worksheet tasks there was minimal external contextual support provided and little regard for students’ internal context (life experiences and prior knowledge; Cummins,
2001). Without contextual support, the otherwise undemanding tasks became difficult to complete since the cognitive, culture, language and learning load of the events created barriers to meaningful instruction for CLD students which ultimately positioned them as deficient learners. Further, the assimilative nature of the worksheets was neither responsive to nor respectful of students’ cultural identities.

As Cummins (2001) has asserted, however, CLD students do not just passively accept dominant group attributions of their inferiority, but rather resist the process of subordination. The events that unfolded in “Uno, Dos, Tres, Cuatro” for example demonstrate how students like Ines were also drawn to creating events that capitalized on their L1 and their developing English literacy which opened up identity options for them as interested, engaged and autonomous learners. This moved them away from having to mask their “deficiencies” toward demonstrating and building their communicative competence.

Communicative competence may be defined as the ability to function in a truly communicative setting—that is, in a dynamic exchange in which linguistic competence must adapt itself to the total informational input, both linguistic and paralinguistic, of one or more interlocutors (Savignon, in Omaggio Hadley, 2001, p. 4).

This point is especially significant when the links Cummins (2001) has made between the ways in which students learning ESL have been excluded from actively participating in their education and their academic underachievement are fully considered.

Pedagogical Implications

One of the most important points that both narratives demonstrate is how vital it is for teachers of students learning ESL to be aware of the relationship between classroom discursive conditions and students’ “survival” strategies. More specifically, the negative impact and therefore avoidance of fragmented and impoverished presentations and use of language cannot be overstated. This would require students be provided “access to language that is appropriately modified for them, and is issued in ways that allow learners to discover its formal and pragmatic properties” (Wong-Filmore, in Cummins, 1994, p. 51). What is key here is “discover its properties,” a notion that does not entail passivity or neglect on the teacher’s behalf but rather the use of modified language within a context that values purposeful and meaningful activity. As such, instructional opportunities and approaches afforded CLD learners would be reflective of a whole-part-whole approach which necessitates beginning with the use of whole texts, deconstructing textual features and applying and transferring learning into authentic reading and writing experiences (Strickland, 1998). Phonics and phonemic awareness are therefore understood as essential skills taught through the use of environmental print, songs, rhythms, rhymes, poems, books and other texts (visual or print-based). Further, these skills are viewed as partial and incomplete in relation to the vast array of skills and strategies children require to further their literacy development. Skills are unpacked and made explicit for the purpose of enabling students to use them to communicate with others rather than demonstrate their knowledge about them. Any form of literacy curricula would therefore be informed by what is occurring in children’s homes, communities and classrooms. Therefore, skill-related instruction is relevant and responsive to stu-

(Continued on page 57)
What fuels and is at the forefront of this approach is recognition that the central function of language use is meaningful communication (Cummins, 1991). This means rejecting the artificial ‘letter of the week’ approach deemed problematic and ineffective by researchers (Bell & Jarvis, 2002) yet employed by several commercially available and often mandated phonics and phonemic awareness instructional programs used in many classrooms. In contrast, what informs the pedagogical trajectory of literacy instruction is what occurs in children’s homes, communities and classrooms. What children are experiencing becomes the impetus for deciding what literacy opportunities are presented and organized for them. Essentially, this would entail treating students’ cultural backgrounds and first languages as curricular resources rather than impediments.

The pedagogical trajectory I have described is both mostly emblematic of what occurred during the “Uno, Dos, Tres, Cuatro” narrative and illustrated in a framework I have developed that generously borrows from research and other frameworks developed by Cummins (2000) and Strickland (1998). I have coalesced and adapted these frameworks to further illustrate a pedagogical orientation that can organize literacy curricula in ways that extend CLD students’ identity options and position them in possession of assets that can be capitalized on to further their L1 and L2 literacy development.

Focus on Meaning (whole)

- Use and foster context-embedded communication and comprehensible input (e.g., expose and immerse students to a variety of relevant and responsive whole texts (visual, behavioural, print-based etc., and discuss their meaning).
- Access students’ funds of knowledge (e.g., elicit cultural, experiential, community-based and linguistic connections and responses between texts and learners) in order to affirm identity.
- Learning with, through, and about whole texts.

Focus on Language (part)

- Explicit teaching of skill, strategy or textual feature.
- Compare and contrast linguistic features of L2 and L1 to reinforce students’ L1 as a curricular resource rather than an impediment.
- Learning about how the parts function.

Focus on Use (whole)

- Opportunities for students to transfer what they learned.
- Create literature and art (e.g., “identity texts” such as bilingual books or bilingual texts such as Ines’s Man/Ombra labelled illustration).
- Learning to apply what was learned with, through, and about texts.

“...Essentially, this would entail treating students’ cultural backgrounds and first languages as curricular resources rather than impediments.”
Conclusion

It has become abundantly clear that educators can continue to expect an increase of cultural and linguistic diversity within schools. What is less clear is the collective commitment to ensuring that systems (and those who work within them) appropriately respond to this diversity. More importantly, educators need to position CLD students as important curricular informants who have a great deal to offer classroom settings. To this end, theorizing and examples of practice offered in this paper are intended to help foster literacy curricula that create spaces for CLD children to be more than students who do not know English and as such “ESL.” The theorizing and examples are by no means exhaustive. Further, it must be noted that the extending of CLD students' identity options cannot be fully accomplished without comprehensive and systemic school language policies that allow for these practices to be accessed, accepted and further developed.

References


Abstract

This article discusses the role of mentoring for both native English-speaking (NES) and non-native English-speaking (NNES) teachers, highlighting how collaboration can contribute to ESL teacher preparation. Drawing on previous research, the article provides definitions for mentoring and collaboration, then suggests that both mentoring and collaboration have to be two-way to be effective. The article concludes with a few suggestions on how mentoring and collaboration could be built into teacher education programs and argues for the consideration of differences in linguistic, cultural, and educational backgrounds to establish collaborative and mentoring associations.

Research on non-native English speakers (NNES) as English as a Subsequent Language (ESL) teachers has received special consideration over the last several years (e.g. Braine, 1999, Kamhi-Stein, 2004, Llurda, 2005). Some of these studies have addressed the mentoring of NNES teachers in teacher education programs (e.g. Kamhi-Stein & de Oliveira, 2004; Newman & de Oliveira, 2007) and the importance of collaboration for both native English speakers (NES) and non-native English speakers (de Oliveira & Richardson, 2004). Drawing on these previous studies and on an ongoing research project funded by the Teachers of English to Speakers of Other Languages (TESOL) association (de Oliveira, 2007), this article discusses the importance of mentoring for both NES and NNES teachers, highlights how collaboration can contribute to ESL teacher preparation, and suggests how mentoring and collaboration could be systematically built into teacher education programs.

The literature on mentoring new teachers is extensive in the field of teacher education (e.g. Achinstein & Athanases, 2006; Achinstein & Barrett, 2004; Athanases & Achinstein, 2003; Evertson & Smither, 2000; Little, 1990), but the same topic has received limited attention in TESOL. Similarly, collaboration has been a topic of discussion in teacher education for several decades (e.g. Pugach & Johnson, 1995; Russell, McPherson & Martin, 2001; Winn & Blanton, 1997); however, less work has been published in TESOL (e.g. Kaufman & Brooks, 1996). This paper contributes to the discussion of mentoring and collaboration by focusing specifically on the mentoring of NNES and collaboration between NES and NNES teachers. It highlights that individual differences in

...collaboration has been a topic of discussion in teacher education for several decades.
background and experience are an important consideration, as not all those who self-identify as NES and NNES teachers have the same characteristics.

Definitions of Mentoring and Collaboration

Healy and Welchert (2006) point out that the literature on mentoring does not offer a consistent definition of mentoring that has been widely accepted. Mentoring has been defined as “a deliberate pairing of a more experienced person with a less experienced one, with the agreed-upon goal of having the less experienced person grow and develop specific competencies” (Murray, 1991, p. xiv). Healy and Welchert (2006), however, defined mentoring as “a dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (protégé) aimed at promoting the career development of both” (p. 17). In the field of TESOL, the traditional view of mentoring described by Murray, where the mentor “gives” and the mentee “takes,” has been expanded to a two-way directional view where both the mentee and mentor gain from the relationship at the professional and at the personal level (Kamhi-Stein & de Oliveira, 2008).

This two-way directional approach to mentoring includes the following mentoring functions:

1. **Career development** in the form of sponsorship, protection, challenging assignments, exposure, and visibility.
2. **Psychosocial support** in the form of acceptance, coaching, and counseling; and
3. **Role modeling** in the form of behaviors which mentors and mentees can identify with (Godshalk & Sosik, 2003; Kamhi-Stein & de Oliveira, 2008). These functions may be present at varying degrees in a mentoring relationship, which changes and develops over time. In this view, as the diagram shows, the mentoring relationship is dynamic and reciprocal.

Figure 1: Mentoring as a Two-Way Directional Approach (from Kamhi-Stein & de Oliveira, 2008, p. 41)

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1. I prefer to use the term mentee instead of protégé due to the connotation that a protégé needs to be protected in some way. The term protégé emphasizes a one-way relationship whereas mentee emphasizes a focus on the mentoring relationship, referring to one who is being mentored.
functions occur from the mentor to the mentee (mentor → mentee) and the mentee to the mentor (mentee ↔ mentor) which shows a two-way directional approach to mentoring.

This two-way view of mentoring is closely associated with the view of collaboration between NES and NNES teachers, which highlights that a collaborative association should benefit all parties involved (e.g. Saltiel, 1998). Collaboration is a partnership between two or more people who come together to accomplish a common goal and, together, achieve and learn more than they could if they were working alone (Saltiel, 1998). The literature on NES and NNES collaboration has argued that more formal collaborative associations in teacher education programs are needed and that differences in linguistic, cultural, and educational backgrounds are important considerations in developing such relationships (de Oliveira & Richardson, 2004; Matsuda & Matsuda, 2004).

Mentoring Native and Non-native English Speakers

A recent survey of the content of TESOL programs and student-teacher-educators’ experiences with mentoring (Newman & de Oliveira, 2007) highlighted that mentoring was informal in TESOL programs. Forty-one respondents answered the survey: 29 female and 12 male, from 41 different institutions in the United States (27), Australia (3), Venezuela (2), Hong Kong (1), Argentina (1), Canada (1), Mexico (1), Israel (1), China (1), Japan (1), Germany (1), and Turkey. Respondents identified their home languages as English (16), Chinese (5), Spanish (4), Japanese (2), Korean (2), Turkish (2), Finnish (1), French (1), Indonesian (1), Czech (1), Polish (1), Dutch (1), and Hungarian (1), with 3 identifying themselves as Bilingual - Pakistani English/Urdu; Dutch/Polish; English-Hebrew. Even though the study sample was small, students who completed the survey reported, in response to an open-ended question, their ideal mentoring relationship as being formal and mutual, where the two parties respect each other for what they have to contribute to the relationship at both a personal and professional level.

Newman & de Oliveira (2007) also found that students, responding to an open-ended question about mentoring, considered certain elements as integral parts of mentoring relationships. These elements included respect, balance, growth, patience, reciprocity and less of a hierarchy. None of the students mentioned that being a native speaker or a non-native speaker was important in their mentoring relationship. This result suggests that there are other elements that are important in mentoring; that is, other than whether the mentor and mentee self-identify as a native or a non-native speaker. As indicated above, differences in linguistic, cultural, and educational backgrounds and experiences may be important elements to consider when establishing mentoring relationships.

In K-12 teacher education, a combination of student-teaching programs and formal mentoring programs is a common practice. Such a combination involves the student teacher receiving mentoring from both university faculty members as well as classroom teachers (Mullen, 2000). This practice is commonly seen in TESOL teacher education programs, even where the programs vary in many other ways (Ramanathan, Davies & Schleppegrell, 2001). As Ramanathan et al, (2001) point out, such programs may stress different teaching skills, e.g., writing or pronunciation, but a mentoring component is often present.

"...mentors are not born, but made..."
It is important to remember that "...mentors are not born, but made, and are in a continuing process of becoming" (Achinstein & Athanases, 2006, p. 10). Achinstein & Athanases (2006) show that a specific knowledge base for effective mentoring of new teachers is necessary. Although studies are in progress to determine what these skills for NES and NNES teachers in teacher education programs might be, the topic has received little attention so far and needs to be addressed systematically. Considerations of mentoring should occur when the contents of TESOL programs are discussed. In other words, mentoring should become a regular part of teacher preparation programs and should be formal and consistent.

Collaboration between Native and Non-native English Speakers

Similarly, few studies in TESOL have addressed collaboration between NES and NNES teachers (e.g. de Oliveira & Richardson, 2004; Matsuda & Matsuda, 2004). Educators in general seem to recognize the benefits of collaboration with other colleagues but may not be aware of the potential benefits from collaboration between native and non-native-speaking colleagues. In their study on the benefits of collaboration between NES and NNES teachers, de Oliveira & Richardson (2004) found NES and NNES teachers’ individual differences and similarities contribute to collaborative relationships and enhance their understanding of their students, their ability to teach more effectively and their professional lives. The collaborative associations benefit both professionals and, similar to mentoring relationships, have to be two-way to be successful. For a detailed discussion of the benefits of collaboration between NES and NNES teachers, see de Oliveira & Richardson (2004).

Based on insights from their study, de Oliveira & Richardson (2004) recommend the following steps for the development of collaborative associations: 1. Approach another individual and express the wish to collaborate; 2. Use the opportunities that present themselves to find possible collaborators. For example, graduate students taking classes together in an MA TESOL program or teachers attending the same meetings might try to find individuals who seem compatible and would like to collaborate; 3. Remember that successful collaborations are likely to involve a blend of personalities; 4. Work at getting along well and respecting one another in what each has to contribute to the relationship; 5. Recognize how much each collaborator can gain from the collaboration. As de Oliveira and Richardson show through their collaborative association, an NES teacher can gain just as much as an NNES teacher in this type of collaboration.

Similarly, Matsuda (1999-2000) discusses a collaborative model of teacher development based on both-and logic, one in which "teachers see themselves as members of a collaborative community in which they share their special strengths to help each other out" (p. 10). However, this model emphasizes a combination of NES and NNES teachers’ strengths. Matsuda and Matsuda (2004) use this model to describe a journal-sharing collaborative project in a teacher education program through which NES and NNES teachers exchanged ideas, insights for teaching, and reflections. Regular journal sharing among participants led to more understanding about teaching and learning and enabled all participants to exchange opinions. They report that teachers involved in the project learned from each other through the linguistic diversity of the group and conclude that such an experience in teacher education programs can lead to further collaborative associations.
Research on teacher collaboration highlights that collaborative associations have much to contribute to educators’ lives (DiPardo, 1999; Sgroi & Saltiel, 1998). Not much research has been carried out on collaborative relationships between NES and NNES educators. The community of TESOL educators would greatly benefit from further research in this area. In particular, TESOL educators need to know more about how collaborative associations can be created and sustained, what the key elements are for successful collaborations, what the precise benefits are of collaborations between NES and NNES educators, and the impact of differences in linguistic, cultural, and educational backgrounds on the success of collaborative relationships.

**Developing Mentoring and Collaborative Relationships: Suggestions for Teacher Education Programs**

The research referred to in this article points to the importance of mentoring and collaboration as being two-way. Collaboration can evolve from mentoring relationships and collaborative associations can become mentoring relationships. Teacher education programs should encourage collaboration between individuals, independent of the individuals involved self-identifying as NES and NNES teachers. What seems important is that both NES and NNES teachers have strengths and weaknesses. ESL teachers must be able to draw on their personal experiences to continue to grow as professionals. As the research on mentoring and collaboration has suggested, mentoring and collaborative relationships provide opportunities for growth for all parties involved.

An important factor in establishing collaborative and mentoring relationships is that relationships and individual roles evolve. These role associations have to start somewhere and teacher education programs are a good place to start these relationships. Teacher education programs attract people from a wide variety of backgrounds; focusing on building collaborative learning communities is essential. ESL teachers can learn from their differences to build “communities of practice” (Lave & Wenger, 1991; Wenger, 1998) where they interact, collaborate, and discuss issues of practice. Considering differences in linguistic, cultural, and educational backgrounds may be a good start when trying to establish collaborative and mentoring associations. As pointed out already, self-identification as non-native speakers does not equate to a compendium of absolute characteristics. Individual differences are an important consideration. Not all those who self-identify as NES and NNES teachers have the same characteristics, backgrounds, and experiences. Teacher education programs should offer opportunities for people to draw on their different backgrounds to establish the kinds of collaborative and mentoring relationships described here.

References


Abstract

In this article, the authors briefly describe the historical context, theoretical underpinnings and research of content-based language teaching at the University of Ottawa in the 1980s and early 1990s. They then describe the current, large-scale immersion program, including the instruction arrangements, the support offered to immersion students and the teaching challenges identified. Results and analysis of a voluntary survey distributed to all students in both levels of courses in the French program are presented. The survey focused on language teaching in general, on various activities for learning a subsequent language (L2) and course content, and on general satisfaction with the program. Pedagogical activities examined included vocabulary instruction, multimedia activities and quizzes on course content. Student reactions were generally positive with no significant differences between responses of the Level 1 and Level 2 students. Some activities, such as reading exercises, were found to be more helpful for language learning while others, such as review of charts, were more beneficial for content learning. Results varied dramatically by individual course, an indication of how different each content course, and therefore each adjunct language course, is. The authors note the special demands placed upon teachers by immersion courses which are largely offset by the satisfaction level of their students.

The University of Ottawa is the largest and oldest bilingual university in North America, offering degree programs in French and English. To encourage students to take advantage of the bilingual setting of the University by enrolling in courses in the other language, content-based language teaching courses were introduced in 1982. To succeed in these courses, students needed to develop a high level of academic language proficiency to handle academic, cognitively-demanding activities in a context-reduced environment (Cummins, 1982; 1994; 2000). At that time, Krashen in his (1982) input hypothesis claimed that if students received a great deal of comprehensible input at a level just beyond their current language proficiency, (i+1), in a non-threatening (low affective filter) context, language acquisition would take place. The sheltered model was chosen because students would be exposed to authentic academic language but the input would be modified to insure comprehensibility. In 1995, for budgetary reasons, the adjunct model (Brinton, Snow & Wesche, 2003, p.16) in which “students are sheltered in the language course and integrated with native speakers in the content course” was adopted. The current immersion program which was restarted in 2005 follows the adjunct model. In November 2006, student perceptions of the quality and effectiveness of these adjunct courses was tapped through a survey.

(Continued on page 69)
This article opens with a description of the historical context and related research, and continues with a description of the current immersion program. Next, results of the student survey are discussed. Specifically, results related to the evaluation of different course components and the perceived effectiveness of various pedagogical activities are considered. The analysis of the differences between responses for the two levels of the adjunct courses is also discussed.

Historical context and conceptual framework

In the sheltered courses introduced in 1982, students took content courses, such as Introductory Psychology, in their L2. These courses were linguistically tailored to their needs. A language teacher was assigned to the group to offer advice to the content professor on language issues and to help students with language problems. There was no supplementary language class and only a small amount of time was devoted to language teaching. This approach was based on Krashen’s (1982) input hypothesis. Research on this approach conducted at the University of Ottawa (Edwards, Wesche, Krashen, Clément & Kruidenier, 1984; Brinton, Snow & Wesche, 2003) showed that students in sheltered language classes, even though they received very little formal language teaching, succeeded in the content course, made language gains in comprehension equal to or greater than those of students in regular L2 courses, expressed greater confidence in their language abilities and a greater desire to use the language in real situations. Despite student and teacher satisfaction with this approach, requiring two academic professors to offer the course proved too expensive. Thus, in 1985, an adjunct format was adopted.

In the adjunct format (Brinton, Snow & Wesche, 2003), L2 learners attend a regular three-credit content course, such as “Introduction to Art History,” in their L2 along with native speakers. Such classes of typically 100 to 150 students meet three hours per week, for a period of 13 weeks. The students also register for the complementary, three-credit, one-and-a-half hour adjunct language course linked to the content course. In contrast to the large content classes, in the adjunct classes there are usually only 10 to 15 students, with 20 as a maximum. Unlike Roessingh’s (1999) model, the content course is not sheltered. It is not linguistically tailored to L2 learners’ needs, but the adjunct language class with only L2 speakers is designed to offer support to L2 learners, enabling them to cope with the demands of the content course. The language course is taught by a language teacher who also attends the content course. The content material forms the basis of the language course, but the language teacher also has the opportunity of focusing on language development. Although this format was originally dictated by budget concerns, language teachers preferred this approach because they had more time to focus on language issues with students. Research on the adjunct approach (Hauptman, Wesche & Ready, 1988) also showed that the L2 learners were able to cope with the content course, displayed language gains in comprehension skills, and expressed greater confidence in their L2 proficiency and a greater intention to use their second language in other situations. Roessingh’s (1999) research at the high school level supports these receptive language gains. Although both teachers and students liked the adjunct approach, not enough students enrolled in those courses and this format was dropped by the University in 1995.

“In contrast to the large content classes, in the adjunct classes there are usually only 10 to 15 students…”
In 2005, the University developed a new vision for its programs. The first goal of its academic strategic plan, Vision 2010, is "to play a leadership role in promoting Canada’s official languages. To ensure that students can learn in a setting where cultures coexist and enrich each other, and where students wishing to do so can achieve their full language potential."

It subsequently launched a new immersion or content-based L2 program. This "Régime d’immersion" program began on a small scale in 2005, but has rapidly grown to the point where in 2007-2008 the University is offering 50 immersion courses in French and six in English.

The University’s commitment to the immersion program currently includes granting 200 Immersion Study scholarships, with a value of $1,000 each for participants with an 80 per cent grade point average and 42 Canada’s University Scholarships with a value of $20,000 each over four years for participants with an admission grade point average of 84 per cent. The Immersion Program also supports an immersion club which organizes social and cultural activities, provides student mentors to offer advice to new students and guide them through their program, allows for qualitative grades in first and second years so that grade point averages will not be affected adversely as students develop their L2 skills, sponsors a three-week summer academic program in France in which students take courses in a French milieu with the support of a language teacher from the University of Ottawa and grants an immersion designation on their graduation diploma if students demonstrate a certain level of proficiency in all four skills on the Second Language Certification Test.

The content-based language teaching courses follow the adjunct model described above. At the present time, there are two levels of adjunct language courses. Level 1 courses focus on listening and reading while Level 2 courses focus on speaking and writing. The objectives of Level 1 adjunct courses are to facilitate students’ reading and listening comprehension of the subject matter material; to foster students’ L2 development; and to develop the skills necessary for full participation in courses taught in the target language. Although only reading and listening skills are evaluated, students participate in speaking and writing activities as they work with the language of the content course. The objectives for Level 2 adjunct language courses are to develop students’ speaking and writing on topics related to the subject matter and to foster students’ confidence in expressing their ideas orally and in written form in their L2. At both levels students work with content but are not evaluated on their knowledge of the content per se. For example, on a listening examination students might be given a new passage on a topic from their content course and be evaluated on their comprehension of the passage.

Based on our experience and previous research (Burger, Chrétienn, (Continued on page 71)
Gingras, Hauptman & Migneron, 1984; Migneron & Burger, 1985; Ready & Wesche, 1992; Burger, Wesche & Migneron, 1997) some content courses and some content professors are more suitable than others for content-based language teaching. Ideally, the content professor should provide a good model of the language for students and offer rich input (Krashen, 1982; Lyster, 2007). The professor should be fluent enough to be able to adapt to the needs of L2 learners (Johnson, 1997). The professor should deliver well-organized, predictable lectures so that learners can concentrate on the content and not be disturbed by surprises. A multi-modal presentation of material is also desirable (De Courcy, 1997), i.e., written material, such as textbooks, articles, PowerPoint notes, or lecture summaries, related to what is presented in class. This redundancy provides scaffolding for L2 learners. Finally, the professor should be willing to adapt evaluation procedures to the needs of L2 learners, e.g., allowing more time for examinations or permitting the use of a dictionary.

The adjunct language class is very different from regular language classes. There is no fixed methodology and no particular L2 textbook. Each content course is different and makes different linguistic demands on students (Ready & Wesche, 1992; Burger & Toews-Janzen, 2004). The overall objective for receptive courses is the development of reading and listening comprehension skills to enable the student to assimilate the subject matter of the content course. For the productive courses, on the other hand, the focus is on oral and written production with a view to developing language proficiency in the academic domain. Allowance is made for the particular requirements of the different disciplinary courses. Thus, in one adjunct class, the language teacher might have to address the complex language sentence or paragraph structure of the reading material, while in another there could be issues of oral comprehension linked to the speed of delivery, lack of visuals and the accent of non-native speakers.

The present study

To help us evaluate the effectiveness of this new, large-scale program, a survey was distributed to all French Immersion students in November, 2006. Its purpose was to find out what works from the perspective of the students and to identify areas needing attention and adjustment from staff.

The research questions were:

1. How did students perceive different course components? Which activities did they find helpful for improving language skills and for learning the content course material?
2. Were there any differences between Level 1 courses, which stress the receptive skills of reading and listening, and Level 2 courses, which focus on the productive skills of speaking and writing?

The Participants

A voluntary survey was distributed, by an assistant, to all French Immersion students in November 2006. It was anonymous and only the course section was identified. A total of 172 students in fifteen sections of Level 1 Immersion and five sections of Level 2 Immersion courses completed the questionnaire. The vast majority (158/172 = 92 per cent) of respondents were full-time students, 109 of whom were in their...
first year. As well, most students were enrolled in either the Social Sciences \((n = 90)\) or Arts \((n = 41)\) faculties. As to why they were taking the course, most students \((n=85)\) stated that they enrolled in the adjunct course because it provided an elective towards their degree. Others \((n=48)\) had chosen it for personal improvement, while the smallest group \((n=39)\) were taking it to satisfy the requirements of their current or planned program of study.

The instrument

Based on a questionnaire used in monitoring the earlier content-based program (Ready & Wesche, 1992), a survey was developed to elicit students' perceptions of the quality of teaching and the usefulness of various aspects of the courses for improving both their French and their understanding of the course content. This survey included a set of demographic questions and an additional three sections. The first section dealt with students' evaluation of the quality of various components of the language teaching in their adjunct class. The second section focused on particular activities in the language class and their helpfulness in supporting the learning both of content and language. For this section, students were presented with a list of 15 activities teachers reported to have used in their classes and rated them on a three-point Likert scale. They were also asked to identify in open-ended questions which activities they found most helpful for learning course content and their L2. In the third section, overall satisfaction was tapped by asking students if they would recommend the course and whether they would have succeeded in the content course without the language component.

Results

This section will report on the results from the three sections of the survey. These are first, the quality of language teaching, summarized in Tables 1 and 2; second, various language activities for learning language and content presented in Tables 3, 4 and 5; and finally, satisfaction with the program, shown in Tables 6 and 7. Within each of these three parts, the results will be presented with Levels 1 and 2 combined, and for each of the two levels separately.

Perceived quality of language course components

Students rated the quality of various aspects of the language course on a four-point scale, where 1 was equivalent to poor and 4 was equivalent to very good. Table 1 displays the mean responses for the questions concerning instruction in different aspects of the language, for the total group and broken down for the two levels of the course. In general, the students found the language teaching fairly good and most of the ratings were between 2.6 and 2.8. There was not much difference in the student perception of the quality of teaching between the evaluations of the Level 1 receptive course and Level 2 productive course students. The first-level students gave the teaching of listening and reading slightly higher ratings than did the second-level students. The latter rated the teaching of speaking and writing slightly higher than did the first-level students. The teaching of vocabulary received the highest rating, perhaps reflecting the students' awareness of the importance of vocabulary improvement.
Table 1: Perceived quality of instruction in the language course

<table>
<thead>
<tr>
<th>1=Poor</th>
<th>2=Fair</th>
<th>3=Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=172</td>
<td>Level 1 N=136</td>
<td>Level 2 N=36</td>
</tr>
<tr>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Teaching of vocabulary</td>
<td>3.01 .87</td>
<td>2.99 .89</td>
</tr>
<tr>
<td>Teaching of listening</td>
<td>2.74 .99</td>
<td>2.78 .98</td>
</tr>
<tr>
<td>Teaching of reading</td>
<td>2.74 .90</td>
<td>2.79 .92</td>
</tr>
<tr>
<td>Teaching of speaking</td>
<td>2.74 1.01</td>
<td>2.72 1.03</td>
</tr>
<tr>
<td>Teaching of writing</td>
<td>2.60 .96</td>
<td>2.59 .95</td>
</tr>
<tr>
<td>Teaching of grammar</td>
<td>2.63 .95</td>
<td>2.58 .95</td>
</tr>
</tbody>
</table>

Table 2: Ratings of L2 Course in General

<table>
<thead>
<tr>
<th>1=Poor</th>
<th>2=Fair</th>
<th>3=Good</th>
<th>4=Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=172</td>
<td>All data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>S.D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General quality of L2 teaching</td>
<td>2.96 .85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of student performance in the L2 class</td>
<td>2.95 .88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language course in general</td>
<td>2.85 .86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement in ability because of this class</td>
<td>2.78 1.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplementary materials provided for self-study</td>
<td>2.77 .95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Match of course content to my L2 learning needs</td>
<td>2.70 .95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of technology to support teaching</td>
<td>2.48 .93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued from page 72)

The ratings of other aspects of the language course are displayed in Table 2.

The table shows that there is not much variation in the responses and most of the ratings were between 2.7 and 3.0, where 3 corresponds to “good.”

Helpfulness of activities in improving language

The second section of the survey focused on particular activities in the language classes and their perceived helpfulness in improving the learning of the language and the learning of content. Tables 3 and 4 display the results. The students evaluated these activities on a three-point scale, where “1” was equivalent to “not helpful” and “3” was equivalent to “very helpful.” As above, responses are broken down by course level, but none of the differences between the two levels was statistically significant.

The average for each activity rated fell between 2 (helpful) and 3 (very helpful). “Individual tutorial sessions with L2 teacher” received the most positive ratings, with the second most helpful activity being “Lecture notes from L2 professor.” Table 4 lists the same classroom activities relative to their helpfulness in learning the content course material.

(Continued on page 75)
### Table 3: Mean Rating of Helpfulness of Various Language Activities to Improve L2 Skills

<table>
<thead>
<tr>
<th>Activity</th>
<th>All data (N=172)</th>
<th>Level 1 (N=136)</th>
<th>Level 2 (N=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Individual tutorial sessions with L2 teacher</td>
<td>2.81 1.01</td>
<td>2.82 1.01</td>
<td>2.86 1.07</td>
</tr>
<tr>
<td>Lecture notes from L2 professor</td>
<td>2.63 .98</td>
<td>2.64 1.00</td>
<td>2.69 .87</td>
</tr>
<tr>
<td>Multimedia activities created by L2 teacher</td>
<td>2.54 .97</td>
<td>2.59 .92</td>
<td>2.13 .62</td>
</tr>
<tr>
<td>Access to multimedia at Resource Centre</td>
<td>2.53 1.00</td>
<td>2.54 .97</td>
<td>2.57 1.09</td>
</tr>
<tr>
<td>Informal grammar correction</td>
<td>2.52 .83</td>
<td>2.49 .88</td>
<td>2.58 .64</td>
</tr>
<tr>
<td>Discussion of supplementary readings</td>
<td>2.50 .83</td>
<td>2.53 .83</td>
<td>2.42 .83</td>
</tr>
<tr>
<td>Reading exercises with textbooks</td>
<td>2.45 .90</td>
<td>2.54 .94</td>
<td>2.13 1.36</td>
</tr>
<tr>
<td>Review of lectures</td>
<td>2.44 .73</td>
<td>2.46 .71</td>
<td>2.33 .80</td>
</tr>
<tr>
<td>Oral presentations and oral activities</td>
<td>2.44 .72</td>
<td>2.47 .72</td>
<td>2.30 .73</td>
</tr>
<tr>
<td>Reading exercises with articles</td>
<td>2.40 .86</td>
<td>2.42 .84</td>
<td>2.33 .80</td>
</tr>
<tr>
<td>Vocabulary exercises</td>
<td>2.40 .75</td>
<td>2.39 .78</td>
<td>2.44 .64</td>
</tr>
<tr>
<td>Quizzes on course content</td>
<td>2.29 .78</td>
<td>2.35 .76</td>
<td>2.00 .82</td>
</tr>
<tr>
<td>Review of charts</td>
<td>2.28 .96</td>
<td>2.25 .95</td>
<td>2.44 .64</td>
</tr>
<tr>
<td>Writing exercises</td>
<td>2.27 .83</td>
<td>2.28 .85</td>
<td>2.24 .74</td>
</tr>
</tbody>
</table>

### Table 4: Mean Rating of Helpfulness of Various Language Activities to Enhance Learning of Content

<table>
<thead>
<tr>
<th>Activity</th>
<th>All data (N=172)</th>
<th>Level 1 (N=136)</th>
<th>Level 2 (N=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Individual tutorial sessions with L2 teacher</td>
<td>2.64 1.00</td>
<td>2.69 .79</td>
<td>2.43 1.03</td>
</tr>
<tr>
<td>Review of lectures</td>
<td>2.61 .72</td>
<td>2.62 .75</td>
<td>2.59 .72</td>
</tr>
<tr>
<td>Review of charts</td>
<td>2.60 .92</td>
<td>2.56 .83</td>
<td>2.77 .94</td>
</tr>
<tr>
<td>Discussion of supplementary readings</td>
<td>2.48 .72</td>
<td>2.46 .50</td>
<td>2.60 .76</td>
</tr>
<tr>
<td>Quizzes on course content</td>
<td>2.47 .80</td>
<td>2.52 .85</td>
<td>2.25 .79</td>
</tr>
<tr>
<td>Reading exercises with textbooks</td>
<td>2.46 .77</td>
<td>2.57 .64</td>
<td>1.92 .76</td>
</tr>
<tr>
<td>Oral presentations and oral activities</td>
<td>2.40 .71</td>
<td>2.47 .73</td>
<td>2.16 .69</td>
</tr>
<tr>
<td>Lecture notes provided by the L2 professor</td>
<td>2.40 .82</td>
<td>2.42 .77</td>
<td>2.38 .83</td>
</tr>
<tr>
<td>Writing exercises</td>
<td>2.37 .84</td>
<td>2.37 .76</td>
<td>2.39 .86</td>
</tr>
<tr>
<td>Vocabulary exercises</td>
<td>2.34 .73</td>
<td>2.38 .72</td>
<td>2.15 .73</td>
</tr>
<tr>
<td>Reading exercises with articles</td>
<td>2.33 .74</td>
<td>2.39 .76</td>
<td>2.00 .73</td>
</tr>
<tr>
<td>Informal grammatical correction</td>
<td>2.24 .77</td>
<td>2.31 .75</td>
<td>1.91 .77</td>
</tr>
<tr>
<td>Multimedia activities created by L2 teacher</td>
<td>2.17 .98</td>
<td>2.23 .79</td>
<td>1.57 .98</td>
</tr>
</tbody>
</table>
As in Table 3, the overall ratings fell between “helpful” and “very helpful.” The perceptions of the usefulness of these activities appear lower in Level 2 than in Level 1. T-tests were performed to determine if the differences between the responses in Level 1 students and Level 2 students in tables 3 and 4 were statistically significant. Because multiple tests were performed, a Bonferroni correction was applied, with the required significance level set at .003 instead of .05. None of the differences between the Level 1 and 2 students in tables 3 and 4 was found to be significant.

In open-ended questions, students were asked to refer to the activities listed on the questionnaire and then to name the activities in the language class which they found most helpful for learning content or for improving their L2. Table 5 presents the number of occurrences of the activities cited.

Oral presentations and other speaking activities were mentioned most often in the students’ comments as helpful in learning both the L2 and content. Vocabulary exercises were also mentioned frequently. As might be expected, “Review of lectures” and “Summaries” were mentioned more often as helpful for content learning, but were cited less often as contributing to L2 learning.

Indicators of overall satisfaction

In the last section of the questionnaire students were asked to consider if they would recommend the course to other students. In addition, they were asked to state if they could have succeeded without the adjunct language course. Table 6 presents the general results while Table 7 looks more closely at the responses of particular classes.

The overall results are generally positive but students do not provide as strong an endorsement as program organizers might have hoped for. A closer look at particular classes helps to clarify the picture: results vary considerably by individual course. For example, students in one history class evidenced strong dissatisfaction with the course while in other sections the vast majority of students endorsed the course. While students were requested to clarify their responses, few chose to do so.

Discussion

A closer examination of the context could provide an explanation for our findings.

The role of vocabulary

Table 1 showed that students in both levels rated the teaching of vocabulary highest. In addition, when asked to name which activities were most useful, many students wrote down “vocabulary activities.” The high rating was supported by student write-in comments: "I found that the vocabulary presentations in the FLs course enriched my knowledge of vocabulary and helped me better understand the course." "It’s always better when we know the vocabulary before going into class." "I had the most difficulty with the new words we learned, but I find that the vocabulary exercises helped me a lot." This perception of the relative importance of vocabulary is not surprising, as research (Laufer, 1989, 1991) has demonstrated the importance of vocabulary knowledge for reading comprehension. See also Cobb (2001) where he noted that students' scores on the university word list measure (Laufner & Nation, 1999) strongly predicted reading comprehension scores, thus indicating correlation between vocabulary knowledge and reading comprehension.
Table 2 shows general satisfaction with the language courses. The lowest rating, 2.5, was given to “the use of multimedia to support teaching.” This rating may reflect the fact that some language teachers do not take full advantage of technology in their classes, although it is readily available. Tables 3 and 4 show a noticeable difference in the ratings for “Multimedia activities created by L2 teacher” between the Level 1 (2.59) and Level 2 students (2.13). This is possibly due to the fact that it is relatively easy to develop a multimedia activity for listening or reading, while developing activities for writing and speaking is much more challenging. Working with multimedia activities was perceived as more useful for language learning than for content learning, where it received the lowest rating of all activities.

Multimedia activities

Table 2 shows general satisfaction with the language courses. The lowest rating, 2.5, was given to “the use of multimedia to support teaching.” This rating may reflect the fact that some language teachers do not take full advantage of technology in their classes, although it is readily available. Tables 3 and 4 show a noticeable difference in the ratings for “Multimedia activities created by L2 teacher” between the Level 1 (2.59) and Level 2 students (2.13). This is possibly due to the fact that it is relatively easy to develop a multimedia activity for listening or reading, while developing activities for writing and speaking is much more challenging. Working with multimedia activities was perceived as more useful for language learning than for content learning, where it received the lowest rating of all activities.

Individual attention to students

In Tables 3 and 4, “Individual tutorial sessions with L2 teacher” was the most helpful activity for all students. Working in small groups was useful for learning the content as well as the language. In fact, there were no individual one-on-one tutorial sessions with the language teacher but, because of the smaller class size with only two to four students in Level 2, compared with the content classes, where groups could be as large as 200 in some cases, the students may have considered the language class a form of tutorial where they received individual attention. The second most helpful activity was the “Lecture notes from L2 professor.” This activity enabled students to focus on new vocabulary and terminology while reviewing the content at the same time.

Helpfulness of activities

It is not surprising that the least helpful activities for language improvement were “Quizzes on course content,” “Review of charts,” and “Writing activities.” The first two focus more on content and less on the acquisition of the L2.
Table 6: Two Measures of Satisfaction – the whole sample

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Maybe</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you recommend the Immersion course?</td>
<td>63 %</td>
<td>23 %</td>
<td>13 %</td>
<td>122</td>
</tr>
<tr>
<td>Would you have succeeded without the language component?</td>
<td>51 %</td>
<td>42 %</td>
<td>7 %</td>
<td>134</td>
</tr>
</tbody>
</table>

Table 7: Two Measures of Satisfaction - particular classes

<table>
<thead>
<tr>
<th>Course</th>
<th>FLS 2581 History N=24</th>
<th>FLS 2581 Political Science N=14</th>
<th>FLS 2581 Psychology N=15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you recommend the Immersion course?</td>
<td>YES</td>
<td>3/16=19 %</td>
<td>8/10=80 %</td>
</tr>
<tr>
<td>Would you have succeeded without the language component?</td>
<td>YES</td>
<td>13/18= 72%</td>
<td>3/11=27%</td>
</tr>
</tbody>
</table>

The low rating given to writing activities is disappointing especially in the Level 2 course where improving writing is one of the objectives. Students have always found writing activities very demanding and it is difficult for the language teacher to find enough time to devote to teaching writing within the time constraints of the complementary language course. On the other hand, “Review of lectures,” “Review of charts,” and “Discussion of supplementary readings” are obviously more important for content learning but less important for language learning and the results indicate this.

In some cases, trends in the data, while not statistically significant, were interesting to consider. As the ratings in Tables 3 and 4 indicate, “Reading exercises with textbooks” appeared to be more important for Level 1 students than for Level 2 students for both language and content. Students in Level 1 courses, where the goal is to improve reading comprehension, need more help with the reading of content material while this is deemphasized in the Level 2 courses.

Differences between Level 1 and Level 2

While we anticipated that there might be differences between Level 1 and Level 2 students, none proved statistically significant. Bayliss pointed out in her (2006) study on the implementation of the immersion courses that there is great variation in the way each immersion course is delivered. The language teacher must respond to the specific challenges and requirements of the content course; for example, sometimes emphasizing listening skills, sometimes concentrating on content-specific vocabulary. In addition, the proficiency level of the students within any given class varied, with some students needing intensive work on comprehension, while others were already eager to hone their productive skills. It is likely that this great variation in students’ ability and course delivery obscured any differences that might have been present between the two levels of the program.

As Table 7 indicates, the history students expressed much lower satisfaction with the immersion course than the other immersion students. Why were
The goal of the survey was to discover students’ perceptions of the different activities: the ones they found helpful for improving both language skills and learning of the course-content material. While all the activities in the language class were considered helpful, students most appreciated the small classes and the individual attention they received. In general, the activities found useful for improving language skills were different from those for learning the content course material. For language learning the students favoured multimedia, language and grammar activities, while for content learning they preferred reviewing the course content in different ways. Except for multimedia activities which were not available in 1992, these results concur with those of Ready and Wesche (1992). A second goal of the survey was to compare student perceptions of Level 1 class activities focusing on receptive skills with Level 2 activities focusing on productive skills. There were no statistically significant differences between the levels, but for content learning, Level 2 learners tended to give lower ratings to two-thirds of the activities that were favoured by Level 1 learners. The reason for this may be that these learners were more proficient and therefore needed less help in dealing with the content material. As for language learning, about half of the activities were rated slightly lower by the Level 2 students. The researchers had expected oral and writing activities along with informal grammar to be more appreciated by Level 2 students. While these students did appreciate the informal grammar correction more than Level 1 students, discussion, oral presentations and writing activities received a lower rating perhaps because it was a course where production was being evaluated and there was not enough time in the weekly hour-and-a-half timeframe to do justice to this aspect of language development.

The survey results indicate general satisfaction with content-based teaching as implemented at the University of Ottawa. Most of the students surveyed enjoyed the approach, appreciated the activities done in the adjunct class, and really liked the extra attention provided by having a smaller class. Because each immersion content course is different, the adjunct courses will also be different. Consequently, no standardized language course can be prescribed. However, certain optimal conditions for a successful immersion program emerged from our experience. First, it is important to have knowledgeable content professors who are well organized and are sensitive to the needs of L2 learners. The input adaptation they
might provide is necessary but not sufficient to ensure L2 acquisition (Brinton, Snow & Wesche, 2003). A second condition for success in the immersion approach is to choose language teachers who believe in it. Teaching the adjunct courses makes special demands on them as they must invest time and expertise in familiarizing themselves with the content material and preparing language learning material unique to the course. They must provide systematic help for L2 learners in a short one-and-a-half-hour per week meeting. Some measures could be taken to facilitate their task. These include limiting class size and ensuring linguistic homogeneity in the class through minimum language proficiency requirements.

Implementing an immersion approach requires a high commitment of human and material resources on the part of an institution. It must provide suitable content professors and language teachers and compensate them appropriately for the extra work required. In addition, supporting students with scholarships, extra-curricular activities and academic support services make the program attractive to students. Previous research at the University of Ottawa demonstrated the effectiveness of this approach in improving students’ receptive skills in their second language.

According to Long (1991) incidental language instruction may help students focus on form which may foster greater accuracy in language use (Lyster, 2007). Requiring comprehensible output (Swain, 1985) and providing feedback on form (Lightbown, 1998) may be more effective in developing linguistic accuracy. Our second level production courses are relatively new and research should be done to investigate techniques and best practices that could be used to improve oral and writing skills.

References


(Continued from page 78)


