Dictionary Use and Preferences of L2 English Learners in an Intensive English Context

Lori A. Wolter

St. Cloud State University

Follow this and additional works at: http://repository.stcloudstate.edu/engl_etds

Recommended Citation

Dictionary Use and Preferences of L2 English Learners in an Intensive English Context

by

Lori A. Wolter

A Thesis
Submitted to the Graduate Faculty of
St. Cloud State University
in Partial Fulfillment of the Requirements
for the Degree
Master of Arts in
English: Teaching English as a Second Language

May, 2015

Thesis Committee:
Choonkyong Kim, Chairperson
Shawn Jarvis
Isolde Mueller
Vocabulary is the most essential part of language proficiency (Carter & McCarthy, 1988). As ESL students develop their understanding of and expressive ability in English, it is increasingly important that they employ language learning strategies to deal with the unknown words that they encounter. Dictionaries are one learning strategy that students can use to help them acquire new vocabulary knowledge. Their use is acknowledged as a beneficial strategy for both understanding words in context and using them productively in speech and writing. However, in order to utilize dictionaries well, students need to know how to use them effectively. Unfortunately, little research exists about students’ actual use of dictionaries (Luppescu & Day, 1993).

In order to address this lack of research, this study investigated ESL students’ use of as well as opinions about dictionaries as well as the training they receive in their classes related to dictionaries. Data was collected through four parts, including observation, interviews, and questionnaires. Twenty ESL students from varying levels of a university’s IEP performed a glossary creation task in pairs in which they created vocabulary glossary items for five to ten new words that they selected from a reading. The task involved observation and video-recording. This was followed by an audio-recorded stimulated recall interview for one pair from each of three levels. Two separate questionnaires delivered to the student participants as well as teachers from the program were also used. The questionnaires asked about dictionary use habits as well as preferences with and their knowledge about dictionaries.

The results showed that, while the student participants reported that they used a combination of book and online dictionaries, they overwhelmingly relied on online dictionaries. The participants also were selective in the information they used from dictionaries, often including only information about definition and examples in their glossaries. The findings of this study indicate that teachers should incorporate ongoing training about online look-up sources into their classes as well as to train students in how to utilize the rich information provided in dictionary entries. Learning about how to use information about part of speech and collocation can benefit students as they develop their productive language abilities.
# Table of Contents

<table>
<thead>
<tr>
<th>List of Tables</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List of Figures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

**Chapter**

I. **INTRODUCTION** .......................................................... 9
   - Statement of the Problem ........................................... 9
   - Research Questions .................................................. 12

II. **LITERATURE REVIEW** ............................................... 13
   - Vocabulary ............................................................ 13
   - Language Learning Strategies .................................... 13
   - Dictionary Use ........................................................ 14
   - Studies of Dictionary Use ........................................... 16
   - Learners’ Use and Preferences ..................................... 18
   - Training and Skill Development ................................... 20

III. **METHODS** ............................................................... 22
   - Participants ........................................................... 23
   - Description of Data Collection Instruments and Procedures  25
   - Glossary Creation Task and Stimulated Recall Interview .... 26
   - Stimulated Recall Interview ....................................... 32
   - Student Questionnaire ............................................... 33
   - Teachers’ Questionnaire ............................................. 34
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Stimulated Recall Interview Protocol</td>
<td>70</td>
</tr>
<tr>
<td>E. Dictionary Survey for ESL Students</td>
<td>72</td>
</tr>
<tr>
<td>F. Dictionary Survey for ESL Teachers</td>
<td>75</td>
</tr>
<tr>
<td>G. Consent Letters for Student Participants</td>
<td>78</td>
</tr>
<tr>
<td>H. Consent Letters for Teacher Participants</td>
<td>80</td>
</tr>
</tbody>
</table>
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demographics of Student Participants</td>
<td>24</td>
</tr>
<tr>
<td>2. Demographics of Teacher Participants</td>
<td>25</td>
</tr>
<tr>
<td>3. K2, Academic and Off-List Words for Beginner Text</td>
<td>28</td>
</tr>
<tr>
<td>4. Academic Words and Off-List Words for Intermediate/Advanced Test</td>
<td>29</td>
</tr>
<tr>
<td>5. Categories for Look Ups</td>
<td>31</td>
</tr>
<tr>
<td>6. Student Survey Questions by Group</td>
<td>36</td>
</tr>
<tr>
<td>7. Teacher Survey Groups and Questions</td>
<td>37</td>
</tr>
<tr>
<td>8. Totals for Types of Look Ups</td>
<td>38</td>
</tr>
<tr>
<td>9. Frequencies and Percentages of Word Information for Three Groups</td>
<td>38</td>
</tr>
<tr>
<td>10. Total Frequencies and Percentages of Types of Word Information</td>
<td>42</td>
</tr>
<tr>
<td>11. Stimulate Recall Responses</td>
<td>43</td>
</tr>
<tr>
<td>12. Descriptive Statistics of Dependent Variable (Language Level) for Student Questionnaire</td>
<td>44</td>
</tr>
<tr>
<td>13. Frequencies and Percentages for Books and Online Dictionary Use</td>
<td>44</td>
</tr>
<tr>
<td>15. Means and Standard Deviations for Word Information Type</td>
<td>46</td>
</tr>
<tr>
<td>17. Descriptive Statistics of Dependent Variable (Teaching Experience) for Teacher Questionnaire</td>
<td>48</td>
</tr>
<tr>
<td>18. Means and Standard Deviations for Teacher Opinions</td>
<td>48</td>
</tr>
<tr>
<td>19. Mean and Standard Deviation for Teacher’s Dictionary Use in Class</td>
<td>49</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>20. Mean and Standard Deviations for Student Comfort with and Knowledge about Dictionaries</td>
<td>49</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Percentages of Word Information Types for All Beginner Look Ups</td>
<td>39</td>
</tr>
<tr>
<td>2.</td>
<td>Percentages of Word Information Types for All Intermediate Look Ups</td>
<td>40</td>
</tr>
<tr>
<td>3.</td>
<td>Percentages of Word Information Types for All Advanced Look Ups</td>
<td>41</td>
</tr>
<tr>
<td>4.</td>
<td>Percentages of Word Information Types for All Look Ups</td>
<td>42</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Statement of Problem

In their quest to acquire English, ESL students are, for good reason, concerned about learning new vocabulary. Words form the basis of language, and learners’ communicative abilities are often hindered by their inability to understand or use words. Learning an increasing amount of vocabulary takes time, diligence, and work. The process also requires that students develop ways and strategies to learn the new words they continuously encounter during exposure to input. Just as the best learners use strategies to deal with unknown words, effective second language teachers must take note of how students use strategies in order to better inform their teaching and thus improve their students’ language learning and acquisition.

One known strategy for dealing with unfamiliar words is dictionary use. When used efficiently and successfully, dictionaries can be a source of word information used autonomously by students. Learners feel empowered by the ability to use a dictionary (Gonzalez, 1999). Effective English teaching should include providing students training in how to look up information about words. Instead of relying on teachers or others knowledgeable about English, dictionaries can offer systematic information about words. However, learners must have the skills to effectively use them. They must have prior and continuous training in how to use the rich information that dictionaries provide. Teachers cannot just assume that students know how to use dictionaries effectively. Instead, as with any learning tool, many questions about usage must be asked about this particular strategy.
In the Midwestern university intensive English program in which I was teaching while this research was conducted, I had both informally observed in classes that students lacked both the desire to use traditional book dictionaries as well as the skills to use them. While learners preferred to use online dictionaries, they often failed to use the rich information provided in the dictionary entries during their look ups. I found that even my more advanced students did not consider information in dictionary entries about the part of speech. It was often frustrating as a teacher to see students find the definition of a word but fail to use the correct derivation. Dictionary use training was also an insignificant part of the program’s course outcomes and goals. The course goal of developing students’ monolingual dictionary skills was only mentioned for the lowest level of study. However, none of the other levels’ course goals outcomes or goals mentioned the continued development of dictionary use. As dictionary skills are noted as requiring continued skill development (Baxter, 1980; Béjoint, 1981; Christianson, 1997; Fan, 2000; Knight, 1994; Prichard, 2008), multiple semesters of training would be necessary for students to continually and more deeply acquire skills. Furthermore, many students in the IEP did not start in the beginning, lowest-level class but instead entered in at different levels. Those students may have been lacking some key dictionary skills that left them unable to access the helpful information in dictionary entries.

Additionally, most past and current research about dictionary use and training does not address the word look up sources allowed by new technologies. While dictionary research has focused mainly on the use of traditional book dictionaries, the growing use of technology means that students are using online and electronic resources to look up words. Students commonly turn to devices that they easily can carry around, such as smartphones and electronic translators,
when they need to find information about a new word. This left me questioning the amount of skill students had in using not only traditional dictionaries but online and electronic look-up instruments as well. How adept are students at using dictionaries? What type do learners prefer to use—traditional book dictionaries or online look-up sources? What problems do they encounter while using dictionaries? And, perhaps most importantly, are students using and taking full advantage of the rich information provided by dictionaries? Do they simply look for information about a word’s meaning, or do they access more information about categories such as grammatical use, pronunciation and collocations?

In order to investigate these questions, the researcher previously conducted a small-scale study of students’ dictionary use skills and preferences (Wolter, 2012). Six male Saudi Arabian students with low- to low-intermediate level English skills from the same IEP as the participants in this study volunteered. All took part in a glossary creation task and then completed a survey and interview with open-ended questions. Additionally, 10 teachers from the IEP were also asked open-ended questions about their use of dictionaries in class as well as observations about students’ abilities with dictionaries. In this study, students were given the choice of using a book or online dictionary provided to them, but they were also allowed to use translators or any other electronic devices they had to look up words.

The results of the glossary task showed that participants used a book dictionary for about half of the look ups. However, they had difficulty or completely failed to find words while looking them up in book dictionaries 75% of the time with book dictionaries, which then caused the participants to move on to using an online dictionary, with which they always had success. It was concluded that the participants were influenced to use the book dictionaries because of their
desire to act in a way that they thought their teacher-researcher would want them to act. They were clearly more adept with and used to using online dictionaries. In the survey and interview portion of the study, the students voiced their dislike of and lack of need for book dictionaries as well as a preference for online dictionaries. Additionally, the teachers were split in the training they provided in dictionary use. While some included explicit teaching of either book or online dictionary use in their classes, others reported that they had not even considered including such training in the classes they taught.

The original study from 2012 only included six student participants from two levels of the IEP. By replicating the study with more participants, the following study will produce a better informed representation of dictionary preferences and use for this particular population. A stimulated recall component is also being added in order to elicit more in-depth information about student’s dictionary use. While the first study included a short, informal interview with questions about students’ thoughts, actions and difficulties during the glossary creation task, this study will offer more insight into the events that transpire while looking up words.

**Research Questions**

1. How do learners use dictionaries?
2. Do learners actually do what they report they do in terms of look-up behavior?
3. What training do students receive in dictionary use?
CHAPTER II
LITERATURE REVIEW

Vocabulary

Vocabulary is the most essential part of language proficiency (Carter & McCarthy, 1988). In 2004, Folse conceptualized vocabulary as consisting of single words, set phrases, variable phrases, phrasal verbs, and idioms. In terms of vocabulary knowledge, acquiring a word is a multistep task that goes beyond simply knowing a word’s meaning. Word knowledge includes knowing all the possible meanings of a word as well as the word’s connotations, spelling, pronunciation, part of speech, frequency, usage, and collocations (Nation, 2001). Vocabulary can also be divided into two distinct categories: the more casual and often short Anglo-Saxon words and the more complex and longer Graeco-Latin words. For learners preparing for university study, a command of academic vocabulary is especially important.

Language Learning Strategies

While vocabulary had infrequently been a research topic in the past, studies about second language vocabulary issues such as learner strategies and student needs increased dramatically in the mid-1990s (Folse, 2004). Researchers were interested in studying the specific actions students used in approaching learning languages. These actions are referred to as learning strategies. Learning strategies are defined by Oxford (2003) as “specific behaviors or thought processes that students use to enhance their own L2 learning” (p. 8). Students use different learning strategies depending on factors such as task type and context. Some examples of learning strategies are inferring meaning from context, using word parts to learn and remember words, using vocabulary cards, and using dictionaries to look up words (Nation, 2001). However,
the number of strategies available for learners to use in their L2 learning, as well as how to classify these strategies, continues to be a topic of research and debate.

In 1997, Schmitt formulated a taxonomy of learning strategies based on learning vocabulary. This taxonomy differentiated between *discovery strategies*, or those strategies used to find out the meaning of a new word, and *consolidation strategies*, or those used to store the new word in long-term memory. These two categories are then divided into specific strategies such as determination, cognitive, metacognitive, memory, and social strategies. Dictionary use is considered a discovery strategy, according to Schmitt’s taxonomy.

Several studies have looked at the use of learning strategies while reading (Gu & Johnson, 1996; Paribakht & Wesche, 1997). It is commonly argued that teachers often promote guessing from context as a primary strategy for dealing with unknown words while reading (Knight, 1994; Paribakht & Wesche, 1997). In their study of learners’ strategies for new words, Paribakht and Wesche (1997) found that students most often used morphological and grammatical information while reading to deal with unknown words. The researchers, among others, found that learners look up words infrequently while reading (see also Fraser, 1999).

**Dictionary Use**

While guessing from context and other strategies can be effective, dictionary use can be a useful way to comprehend texts and learn more information about unknown words. Dictionaries are defined as books that contain lists of word in alphabetical order with descriptions of their meanings (Landau, 1984). English dictionary entries often contain information about spelling, syllabication, pronunciation, etymology, usage, and synonyms, as well as occasional
illustrations. Furthermore, Landau (1984) noted that dictionaries designed for ESL students often have intentional design features:

ESL dictionaries contain many of the features of foreign-language instruction, such as providing detailed information on pronunciation, verb patterns, and collocations, with some characteristics of children’s dictionaries: definitions are expressed in simplified language and sometimes in a controlled vocabulary. (p. 29)

This type of dictionary also often has detailed grammatical information such as which nouns are countable as well as whether or not verbs are transitive or non-transitive and, if transitive, what specific objects they take. It should be noted that, while these types of information are typical of an English dictionary, dictionaries in other languages may be organized differently. Appendix A has an example entry for the adjective “ideal” from the online Oxford Advanced Dictionary for Learners of English.

When students need to look up information about words or lexical phrases, they have several dictionary resources from which to choose, including paper-based, online resources, and handheld electronic devices. Traditionally, paper book dictionaries have been a common feature of the ESL classroom. These include picture, monolingual, and bilingual dictionaries. For learners with lower language proficiency, picture dictionaries give essential vocabulary in word form along with illustrations instead of definitions. Certain illustrated dictionaries, such as The Heinle Picture Dictionary (2005), feature essential vocabulary in thematic units such as “Money and Shopping” and “Feelings” along with images that explain the terms.

With the rise in technological development, the use of conventional book dictionaries has decreased because of advancements in computer-mediated tools. As early as the late 1990s,
many ESL learners in classrooms had embraced using electronic dictionaries over paper
dictionaries (Al-Jarf, 1999; Tang, 1997). However, few studies have been done about electronic
dictionary use (Liou, 2000; Liu & Lin, 2011). Six common online dictionaries for ESL learners
include the Cambridge Learner’s Dictionary, Cambridge Advanced Learner’s Dictionary,
Longman Dictionary of Contemporary English, Macmillan Dictionary, Merriam-Webster

Although computer-mediated dictionaries serve the same purpose as traditional book
dictionaries, the searching method is different. Liu and Lin (2011) identified two kinds of
computer-mediated look-up aids: The online type-in dictionary, in which a desired word or
phrase is searched for using computer software or online dictionary websites, and the pop-up
dictionary, in which words in a text can be selected or clicked in order to have dictionary entries
appear alongside the text on the screen. Recently developed smartphones and notepads are
capable of offering a variety of educational applications, or apps, such as dictionaries. Type-in
computer-mediated dictionaries offer a more convenient way to search for words (Liu & Lin,
2011) and do not require that users have alphabetical knowledge, a skill that many ESL students
lack.

Studies of Dictionary Use

The majority of empirical user studies of dictionary use have been conducted in the last
three decades (Cote González & Tejedor Martínez, 2011). Nation (2001) gave an overview of
several studies into dictionary use by second language learners. Some dictionary use studies have
concentrated on the use of dictionaries while reading, with many concluding that the use of a
second language dictionary while reading may aid in vocabulary learning (Gu & Johnson, 1996;
Hulstijn, Hollander & Greidanus, 1996; Knight, 1994; Luppescu & Day, 1993) and in reading comprehension (Hulstijn, 1993; Hulstijn et al., 1996; Knight, 1994). In Knight’s (1994) study, students who used dictionaries while reading two texts remembered more word meanings than students who did not look up words. However, studies have not unequivocally found that dictionaries are effective for reading comprehension. Students may look up words that are not necessary for completing a reading task (Hulstijn, 1993; Knight, 1994). In those cases that learners are unable to efficiently find words and deciphering the information given, it is considered an ineffective reading comprehension strategy. Bensoussan, Sim, and Weiss (1983) did not find a significant correlation between dictionary use and reading comprehension scores in studies using three different dictionary conditions: monolingual, bilingual, and no dictionary.

Fewer studies have looked at dictionary use while writing (Christianson, 1997; Harvey & Yuill, 1997; Miller, 2006). In some of these studies, dictionary use was found to improve the use of vocabulary while writing (Miller, 2006). Specifically, the researcher found that dictionaries helped her writing students improve their use of articles. The advanced English learners utilized the grammatical information given about words in dictionary entries to properly use them in their writing. However, in his study of Japanese EFL writers’ use of dictionaries, Christianson (1997) did not find that dictionary use led to improved writing. A significant portion of the words looked up while writing by his study participants were still used incorrectly. Harvey and Yuill (1997) concluded that learners use dictionaries when writing to provide them with information about spelling and meaning. Other categories of information, including synonymic, syntactic and collocational, were used to a much lesser extent. At the same time, the researchers raised concerns about learner awareness of the importance of collocations and understanding the
problems often encountered with synonyms. They suggested that dictionary creators draw attention to these areas within dictionary entries.

**Learners’ Use and Preferences**

Few studies have specifically looked at ESL learners’ preferences and skill with using dictionaries. In 1991, Hartmann stated that “research was just beginning to look at the specifics of the intersection of learner needs and preferences and dictionaries. He also outlined effective dictionary design elements” (p 76). While good design components can increase the helpfulness and effectiveness of dictionary use, students may not be accessing the information offered in dictionaries, or they might be using it ineffectively. Highly relevant to the discussion of learners’ dictionary use, then, are Laufer and Kimmel’s (1997) succinctly defined concepts of “dictionary usefulness” and “dictionary usability” (p. 362). The first concept, dictionary usefulness, addresses how well a dictionary informs the user about necessary information. Dictionary usability, meanwhile, is defined as “the willingness on the part of the consumer to use the dictionary in question and his/her satisfaction from it” (Laufer & Kimmel, 1997, p. 362). Research that looks at what learners do with dictionaries is thus useful, and some student preferences have been found in past research.

For one, students have been found to often prefer certain types of dictionaries. Before the rise of new technology that allows for computerized word searches, Laufer and Kimmel (1997), among others (Baxter, 1980; Bensoussan et al., 1983; Laufer & Hill, 2000), found that students prefer bilingual paper dictionaries, which the researchers characterized as being less effective than monolingual paper dictionaries. While few studies have been done about electronic dictionary use (see Sánchez Ramos, 2005), Tang concluded in 1997 that students favor electronic
dictionaries to other look up sources because of their portability, speed and variety of features, as well as the availability of sound.

Other research has found, though, that while students acknowledge that dictionaries are useful, they may not often use them as a look up source (Bensoussan et al., 1983). Some studies have determined that learners do not use dictionaries often to look up unknown words while reading (Hulstijn et al., 1996; Paribakht & Wesche, 1997). Another study found that lower-level foreign language learners do not often use dictionaries to complete their classwork and homework (Bailey & Onwuegbuzi, 2002).

In those cases that students use dictionaries to find more information about unknown words, they do not always use them effectively. Due to the complex process involved in first finding a word’s entry and then deciphering and using the information listed, dictionary use requires training and practice. Christianson (1997), for one, noted the difficulty researchers have in defining effective and successful dictionaries use. In those studies that have found that learners struggle with using dictionaries well, researchers assert that they would benefit from training in dictionary use (Bejoint, 1981; Christianson, 1997; Fan, 2000; Knight, 1994; Prichard, 2008). In her study of dictionary use while reading, Knight (1994) noted that the majority of her participants had partial but inadequate training in dictionary use. In his study of the dictionary use of Japanese university students, Prichard (2008) found that some learners might need training in selective dictionary use. The high-intermediate and advanced learners studied were sometimes selective in looking up words, but the researcher decided a significant portion of the study’s participants (a third) used dictionaries excessively. Learners need specific, extensive and repetitive training and experience in looking up words and then deciphering their dictionary.
entries. Without such training, students may experience negative effects on their language learning (Baxter, 1980).

Training and Skill Development

Learning how to effectively use dictionaries takes training and the acquisition of skills over time. Teacher-researchers Cote González and Tejedor Martínez (2011) emphasized the importance of continued dictionary training in helping EFL learners gain autonomous learning strategies. In their study of the effects of dictionary training on proper word use and student attitudes, dictionary training and activities were found to positively affect both. However, some research has found that teachers may not be properly and continuously training their students in how to use dictionaries. In her survey of 38 Brazilian EFL teachers, Muller (2012) concluded that, while 94% of the teachers believed that it was necessary for language learners to learn how to use dictionaries, only 14% of them incorporated classroom activities that gave their students the opportunity to use them. Al-Amin and El-Sayed (2014) concluded that that the majority of ESL teachers in Sudanese universities believed that dictionaries were more useful for less advanced learners and failed to see that importance of their use for more advanced students. Their study also showed that the majority of teachers (78%) agreed or strongly agreed that electronic dictionaries are more useful than paper dictionaries.

Some researchers have asserted that learning strategy training must take place repeatedly over an extended period. Nation (2001) argued that for each of the language strategies, such as dictionary use, teachers and learners must devote a total of at least four or five hours per strategy over several weeks. Before starting training, however, teachers will need to develop and practice
their arguments for devoting time to strategy training, since learners (and even other teachers) may question the value of spending so much time on developing learning strategies.

While many studies have investigated assorted aspects of dictionary use, few have focused on how effectively learners use dictionaries. In a study of bilingual dictionary use by Chinese-speaking EFL learners, Chen (2011) found that more advanced levels of vocabulary proficiency used dictionary features more fully. Harvey and Yuill (1997) concluded that English language learners do not often use information about collocation when looking up words. Several researchers have noted the lack of studies about students’ actual dictionary use (Luppescu & Day, 1993). This is a major gap in information in second language acquisition research that needs to be addressed.
CHAPTER III
METHODS

In an effort to address this lack of research and seek answers to the research questions, data from both pre-university ESL students and teachers was collected. Four data collection tools were used: a glossary creation task, stimulated recall interviews, a student survey and a teacher survey. Twenty students from five sections of an intensive English program (IEP) in an upper-Midwestern university participated in the study. Volunteers were recruited from the levels that fit with three groups: a beginner group (from the IEP’s Pre-Level 1 and Level 1 classes), an intermediate group (from the program’s Level 3 classes), and an advanced group (with participants coming from Level 4 and Level 5). First, pairs of students from each group looked up unknown words using either online or book dictionaries and then recorded information in a glossary (see Appendix B and C for glossary task directions and texts for both the beginning and intermediate/advanced groups). Immediately after the glossary creation task, three pairs (one from each of the three groups) took part in a stimulated recall interview (see Appendix D for directions). These pairs were randomly selected. After the completion of the glossary task (and, for some, the interview), questionnaires about dictionary use, knowledge, opinions and training were given to all participants. The surveys were delivered and completed in a paper-and-pencil format. The student questionnaires contained 25 items along with a section of questions about demographics (see Appendix E). Additionally, 17 teachers from all levels of the IEP volunteered to complete a dictionary use, knowledge and opinions survey at the end of the semester. The teacher questionnaire had 22 items and also included demographic questions (see Appendix F).
Participants

The participants in the study were students taking courses in an (IEP) in a medium-sized public university in the upper Midwest. Students from two nations, Saudi Arabia and China, comprised a large majority of the student population in the IEP at the time of this research. The participants differed in the amount of English instruction they had received in their home countries; however, nearly all had had some instruction before arriving. Upon enrolling in the intensive English program, the students took the Michigan English Test in order to be placed in the appropriate language courses. The main objective of the program is to prepare the students for university coursework. Most students in the IEP enroll because they wish to acquire enough English to study at the undergraduate or graduate level. As such, course learning goals and objectives are based on helping learners develop their communicative and academic English skills. The program has six levels of study, from Pre-Level 1, which is for true beginners, through Levels 4 and 5, the former of which is the highest level students complete before undergraduate university study and the latter being the course which students preparing for graduate study must successfully complete. As a result of testing, some students start at more advanced levels while others may be placed in the lowest level. This means that not all students follow the same linear path from the lowest levels to the highest levels of the IEP. The curriculum is, therefore, set up accordingly, with the language and content of the later levels, in particular, being academic.

All components of the study were carried out in the middle to the end of the summer session of the IEP’s classes. A total of 20 students volunteered to participate in the study. For a
description of the demographic characteristics of the student participants in the survey, see Table 1.

Table 1

Demographics of Student Participants

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>18</td>
<td>90%</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td><strong>IEP Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Level 1/Level 1</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>Level 3</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Level 4/Level 5</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Native Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>17</td>
<td>85%</td>
</tr>
<tr>
<td>French</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Spanish</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Years Learning English</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1 year</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>2-4 years</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>4+ years</td>
<td>6</td>
<td>30%</td>
</tr>
</tbody>
</table>

Additionally, 17 teacher volunteers were surveyed at an end-of-semester meeting. Most of the teachers in the program were completing coursework in the university’s Master of Arts in Teaching English as a Second Language (TESL) program while teaching in the university’s IEP. However, several were also adjunct instructors who have already completed their master’s degrees. While the majority of the program’s teachers reported that they were natives of the United States (58.8%, or 10 of the 17 participants), other teachers came from China and four other countries. They also had taught for differing amounts of time. The majority of the participants (64.7%) were female. For a description of the teacher participants’ demographics, see Table 2.
Table 2

Demographics of Teacher Participants

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>Perc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>35.3%</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>64.7%</td>
</tr>
<tr>
<td><strong>Home Country</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
<td>58.8%</td>
</tr>
<tr>
<td>China</td>
<td>3</td>
<td>17.6%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>El Salvador</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>Montenegro</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Years Teaching English</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>7</td>
<td>41.4%</td>
</tr>
<tr>
<td>4-10 years</td>
<td>7</td>
<td>41.2%</td>
</tr>
<tr>
<td>11+ years</td>
<td>3</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

Description of Data Collection Instruments and Procedures

This study used four parts in order to collect information about students’ dictionary use habits as well as to gather data about the process students go through in looking up items. Nesi and Haill (2002) asserted that the majority of research in the realm of dictionary use has used questionnaires or interviews to elicit data. Observation of dictionary use is more challenging to conduct because of its introspective and cognitive nature. Some dictionary use studies have used informal post hoc interviews to gather information about task behavior (Christianson, 1997). Vocabulary researchers have argued that survey data alone is not sufficient to find out about students’ learning strategies (Oxford & Burry-Stock, 1995; Qian, 2004). In their study of students’ self-assessment of their language learning strategies, Oxford and Burry-Stock (1995) noted that surveys fail to describe in a detailed way the language learning strategies that students use during language tasks. Furthermore, they argued that observations alone fail to provide
information about unobservable mental strategies and thoughts processes. The research methodology in this study is thus designed so that the information about dictionary preferences and use given by student participants in the survey are compared with their actions during the glossary creation task as well as their statements in the stimulated recall interview.

**Glossary Creation Task and Stimulated Recall Interview**

In the first two components of the study, student participants took part in a videotaped and audiotaped glossary creation task. Randomly selected pairs (one from each of the three groups) then participated in a stimulated recall interview session. The glossary creation task and stimulated recall were carried out in the IEP program’s computer lab immediately after the participants’ classes ended for the day. This was a more familiar environment for the students and was less intimidating than being in a researcher’s office. It also allowed access to a computer for potential online dictionary use as well as a convenient place to watch the video recording of the glossary task for the stimulated recall interview.

In the first task, the participants worked in pairs with a partner from the same proficiency level in the IEP to design a glossary for unknown words in a text. Two short (about 300 word) non-fiction texts were used from the task from a beginning-level and an advanced-level reading and writing textbook (Q: Skills for Success: Reading and Writing, 2009 and 2011). Because of the language proficiency differences, with participants from the beginning, intermediate and advanced levels of the IEP, two texts needed to be used. The participants at each of the levels needed to have text that was, for the most part, authentically readable and not too challenging. At the same, some of the words needed to be unknown enough to necessitate looking them up in a
dictionary. The task would have been too overwhelming if many of the words in the text were unrecognizable to the participants.

The use of academic texts was important because they contained a range of words, from the most frequently used in English to academic words as well as infrequent words. The most basic words are found in the K1 and K2 lists, from the General Service List (West, 1953, cited in Bauman & Culligan, 1995), which contains the 2000 most frequently used words in English. List K1 has the most frequently used words, and K2 the less frequent. The academic words can be found in the Academic Word List (AWL), a set of 570 high-frequency words that appear in academic texts. These are arranged in a set of 10 sublists, with words on Sublist 1 being the most frequently used, and those on Sublist 10 being the least frequent. Any words that cannot be found in the K1, K2 or Academic Word Lists are considered off-list and uncommon. The texts were analyzed for their inclusion of a sufficient number of words from the Academic Word List as well as off-list words that would most likely be unknown to the study participants. As part of the IEPs’ student learning outcomes for Level 4, students were supposed to be at least familiar with all the words on Academic Word List, while Level 5 learners needed to have mastery of all the words.

Each text was analyzed using the Compleat Lexical Tutor to determine the K2 List, Academic Word List and off-list words. For the beginner text, words that either were on the K2 Word List or the Academic Word List or were off-list were considered to possibly be unknown to the participants. According to the course objectives of the IEP’s two beginning levels, which stated that students were learning common, basic vocabulary, words on the K2 and academic words lists could be unknown to participants. For the intermediate and advanced levels, a
mastery of K1 and K2 word lists is expected, but words that were either from the Academic Word List or off-list could be unknown. The following tables show the K2, Academic and off-list words for the beginner text (Table 3) and the Academic and off-list words for the intermediate/advanced level text (Table 4). The Academic Word List words also include the sub-list number in parentheses.

Table 3

**K2, Academic and Off-List Words for Beginner Text**

<table>
<thead>
<tr>
<th>K2 Word List</th>
<th>Academic Word List Words</th>
<th>Off-List Words **</th>
</tr>
</thead>
<tbody>
<tr>
<td>advice</td>
<td>Experts</td>
<td>ads</td>
</tr>
<tr>
<td>hate</td>
<td>Job</td>
<td>career</td>
</tr>
<tr>
<td>hire</td>
<td>Manual</td>
<td>interview</td>
</tr>
<tr>
<td>hunting</td>
<td>Percent</td>
<td>parachute</td>
</tr>
<tr>
<td>ideal</td>
<td>Specific</td>
<td>postings</td>
</tr>
<tr>
<td>information</td>
<td></td>
<td>résumé</td>
</tr>
<tr>
<td>lot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>luck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>search</td>
<td></td>
<td></td>
</tr>
<tr>
<td>probably</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Not including the proper nouns Americans, Internet, Richard Bolles**
**Table 4**

*Academic Words and Off-List Words for Intermediate/Advanced Text*

<table>
<thead>
<tr>
<th>Academic Word List Words</th>
<th>Off-List Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>academics (5)</td>
<td>accredited</td>
</tr>
<tr>
<td>finally (2)</td>
<td>biology</td>
</tr>
<tr>
<td>grade (7)</td>
<td>curriculum</td>
</tr>
<tr>
<td>inevitably (6)</td>
<td>dictated</td>
</tr>
<tr>
<td>instruction (6)</td>
<td>diploma</td>
</tr>
<tr>
<td>isolation (7)</td>
<td>ecosystems</td>
</tr>
<tr>
<td>notions (5)</td>
<td>enrolled</td>
</tr>
<tr>
<td>options (4)</td>
<td>frustrating</td>
</tr>
<tr>
<td>participation (2)</td>
<td>homeschool</td>
</tr>
<tr>
<td>rejections (4)</td>
<td>intellectually</td>
</tr>
<tr>
<td>solely (7)</td>
<td>junior</td>
</tr>
<tr>
<td></td>
<td>longed</td>
</tr>
<tr>
<td></td>
<td>marine</td>
</tr>
<tr>
<td></td>
<td>misconceptions</td>
</tr>
<tr>
<td></td>
<td>stimulating</td>
</tr>
<tr>
<td></td>
<td>teens/teenagers</td>
</tr>
<tr>
<td></td>
<td>trigonometry</td>
</tr>
<tr>
<td></td>
<td>unhappiness</td>
</tr>
<tr>
<td></td>
<td>viable</td>
</tr>
</tbody>
</table>

**Not including the proper nouns American, California, Davises, Nikki Davis, San Diego, Susan**

For the glossary creation task, dictionary use was controlled so that students had access to both the book and online version of the monolingual Oxford American Dictionary for Learners of English (2011). This dictionary is designed specifically for learners of English and offers a multitude of information about words. All dictionary entry words are printed in a contrasting color to the definition, some entries contain pictures, and all entries list the IPA spelling of the words. The participants were also provided with access to the online version of the dictionary which was open on a browser of the computer near where the student participants were seated.
The participants received written and spoken directions in steps on two separate pages. First, they received a paper copy with the first step along with the approximately 300 word text (see Appendix B for a copy of the task directions and text). The researcher read the instructions out loud to the participants while they read along. They were instructed to read through the text by themselves and then discuss to decide the words that were unknown to both of them. It was suggested that they would find about 5 to 10 words. Then, the participants were instructed to underline the words.

Next, they were given a booklet with 12 pages that were blank except for numbers at the top of the page. The participants were also given the second page of the task directions. Directions 2 and 3 instructed them to first go through the text and number the underlined words in order from the beginning to the end. Then, they were told to write one word on each page in the booklet to correspond with their numbering in the text. The third direction was for the participants to help the researcher explain each of the unknown words in the glossary as if writing for a Pre-Level 1 student in the IEP. They were told to find out and write down important information for the words they selected and wrote in their booklets. The participants were not given instructions on the specific information to include in their word glosses, so the participants had to decide for themselves the information to include.

The participants were given 10 minutes to complete the initial task of reading the text and underlining the words that were unknown to both partners. Then, the participants were told they would have 40 minutes to complete the glossary. They were given alerts when there were 20 minutes, 10 minutes and then 5 minutes remaining so as to help pace them and assure they did not linger too long on completing any one glossary item. This also gave the participants,
depending on their number of words to look up, at least 4 minutes to look up and record information for each word.

Since the negotiation between the pairs was both observed and videotaped, the participants were asked to discuss their actions and thoughts out loud in English as much as possible. To aid in establishing a flow of communication and to promote thinking out loud, each pair completed a 5-minute math puzzle immediately before the glossary creation task. The researcher encouraged talking with one’s partner and describing thoughts and actions during this task, but during the glossary creation task itself, the researcher withheld commentary and instead acted solely as an observer.

Each word look up during the glossary creation task was coded into three categories: Successful, inefficient, or unsuccessful. The three categories were defined as follows in Table 5:

| Successful: | Participant was able to locate the item skillfully and efficiently. He or she did not have difficulty finding the word and accessing information about it. |
| Inefficient: | Participant did not strategically use alphabetic knowledge to find a word and instead spent an inordinate amount of time (longer than 1 minute from the moment he or she opened the dictionary) locating it. |
| Unsuccessful: | Participant attempted to search for a word but was unable to locate it. |

The glossary creation task was pilot tested with two pairs of students. Two pairs were current low-intermediate (Level 2) students in the IEP, and two pairs were former students of the researcher who had passed the last advanced level (Level 4) of the IEP. The first two pairs used
the text intended for the beginning-level student participants, and the latter two pairs trialed the text for the intermediate-advanced students. All pairs found at least 6 words each to look up.

**Stimulated Recall Interview**

Immediately following the glossary creation task, one pair of students from Level 1, Level 3, and Level 5 each took part in a stimulated recall interview. The researcher and the participants viewed the videotaped task together. Both the researcher and the participants were able to pause the video at any point. The participants could stop to explain a thought or action they had during the glossary creation task, and the researcher could pause the video in order to ask for explanation.

At the beginning of the task, the participants were read a standard set of pre-written directions. This followed the stimulated recall interview protocol adapted from those in Leeman’s (1999) study of how recasts promote L2 development (as cited in Gass & Mackey, 2009, p. 43-44). In the stimulated recall interview process, Gass and Mackey (2009) asserted the importance of including directions that not only explain what the researcher should say to prompt the recall comments but also what to say during the recall and after it. Following these suggestions, the stimulated interview began with the researcher reading pre-written instructions about the process. The researcher explained that either participant in the pair could stop the tape at any time if they had a comment to make, while the researcher also had the ability to pause the video. Additionally, the researcher followed guidelines that included asking general questions, not prodding for further comments, and using “backchanneling” comments (see Appendix C for the stimulated recall directions for both the researcher and the participants). This portion of the study took approximately 30 to 40 minutes.
Student Questionnaire

In order to gather more information about dictionary use, preferences and skills, all the participants from the glossary creation task were individually surveyed about their general and specific dictionary look up behavior. Other researchers have used questionnaires to gather information about learners’ dictionary habits and preferences (Baxter, 1980; Chan, 2005; Cote González & Tejedor Martínez, 2011; Hartmann, 1991). Some of the questions were modeled after those used in other dictionary use and preference studies (Chan, 2005; Cote González & Tejedor Martínez, 2011; Hartmann, 1991). Based on Dörnyei and Taguchi’s (2010) recommendation, the survey’s length was kept under 30 minutes in length. The entire questionnaire took participants an average of 10 to 15 minutes to complete. At the end of the survey, demographic information, including age, gender, native language, and home country, was collected. Dörnyei and Taguchi (2010) suggested including this section at a survey’s end to prevent participants from feeling overwhelmed in the beginning by answering personal questions.

The first set of questions asked about participants’ typical dictionary use, including the types of look up resources they use, the frequency with which and the occasions when they use dictionaries, and the types of information they find important to gather from dictionary entries. There was also a question about whether or not students felt they could quickly and easily find dictionary items. The next section included questions about the participants’ past training in dictionary use. For the student surveys, each participant received two informed letters of consent (one for the participant to keep and one to be returned to the researcher) and one copy of the
survey. These three documents were coded with a number unique to each participant. This numbering system was then used to code the participants’ surveys.

**Teacher’s Questionnaire**

In the last study component, the teacher survey was given on a voluntary basis to the 17 instructors who were currently teaching in the IEP and attended a final meeting. They were asked to respond to closed-ended questions in a paper-and-pencil survey about students’ dictionary use in the classroom as well as the training they provide in class. Questions about demographic information, such as their teaching backgrounds and their past and current teaching obligations, were also included. Each teacher received two informed letters of consent, one for them to keep and one to be returned to the researcher, as well as a copy of the survey. The teacher participants were also assigned a unique number for coding purposes. The questionnaire took an average of 10 to 15 minutes for participants to complete.
CHAPTER IV
ANALYSIS

After all components of the student-participant tasks were completed, the video-recorded data from the glossary creation task, along with notes the researcher took during the actual task itself, was qualitatively analyzed for types of look ups (book or online dictionary), successfulness in looking up items, as well as the type of information looked up and recorded. The dictionary glossaries the participants created were coded and analyzed in several ways using the booklets, the notes from the observation and the video recording of the task. First of all, the number of entries created by the students was counted and the parts of the entries coded according to the different categories of word information. Categories included Definition, example in a sentence, part of speech, pronunciation, synonym, word family, translation and collocation. Secondly, word look ups were analyzed and coded as either book dictionary look up or online dictionary look up. Additionally, the look ups were coded as efficient, somewhat inefficient or inefficient. Lastly, notes from the observation of the task as well as the video recording of the sessions were analyzed to determine if students found any additional information, such as listening to pronunciation, while looking up items but failed to record any related information in their booklets.

The stimulated interview recall data was analyzed for patterns in justification for locating and writing down certain types of information about words. Lastly, for the questionnaires, a 5-point Likert scale was used for some questions with items coded as follows: “Never” = 1, “Rarely” = 2, “Sometimes” = 3, “Usually” = 4, and “Always” = 5. For other questions, a 5-point Likert scale was used with the following coding: “Strongly disagree” = 1, “Disagree” = 2,
“Neither Agree nor Disagree” = 3, “Agree” = 4” and “Strongly agree” = 5. Corresponding data was entered into a Microsoft SPSS program. Both the student questionnaire questions and the teacher questionnaire questions were divided into three groups for data analysis: Use, Opinions and Knowledge, and Training. For a list of the groups and their corresponding question numbers for student participants, see Table 6.

Table 6

*Student Survey Questions by Group*

<table>
<thead>
<tr>
<th>Use</th>
<th>Knowledge/Opinions</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. When I look up a word in the dictionary, I find it easily and quickly.</td>
<td>9. I know how to use a book dictionary.</td>
<td>**13. In the future, I would like to have more training on how to use a book dictionary.</td>
</tr>
<tr>
<td>5. I use a book dictionary at home.</td>
<td>11. I think book dictionaries are useful.</td>
<td>23. My teacher taught me how to use an online dictionary.</td>
</tr>
<tr>
<td>6. I use a book dictionary for IEC class assignments.</td>
<td>19. I know how to use an online dictionary.</td>
<td>**24. In the future, I would like to have more training on how to use an online dictionary.</td>
</tr>
<tr>
<td>15. I look up words using an online dictionary during class.</td>
<td>20. I like online dictionaries.</td>
<td>25. I think I have had enough training on how to use an online dictionary.</td>
</tr>
<tr>
<td>16. I look up words using an online dictionary at home.</td>
<td>21. I am comfortable using an online dictionary.</td>
<td></td>
</tr>
<tr>
<td>17. I look up words using an online dictionary for IEC class assignments.</td>
<td>22. I think online dictionaries are useful.</td>
<td></td>
</tr>
</tbody>
</table>

**Point scale was reversed**

Table 7 shows the three question type groups (Use, Knowledge/Opinions and Training) and the corresponding question numbers for the teacher survey.
Table 7

**Teacher Survey Groups and Questions**

<table>
<thead>
<tr>
<th>Use</th>
<th>Knowledge/Opinions</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I use a dictionary in the ESL class I teach.</td>
<td>10. I like dictionaries.</td>
<td><strong>14. I would like to receive more training on how to use a dictionary in my teaching.</strong></td>
</tr>
<tr>
<td>6. I expect my students to use a dictionary in class.</td>
<td>11. I think dictionaries are useful.</td>
<td>15. I spend enough class time teaching students how to use a dictionary.</td>
</tr>
<tr>
<td>7. I expect my students to use a dictionary outside of class.</td>
<td>12. Dictionaries are an important part of the ESL classes I teach.</td>
<td>16. I should use a dictionary for more in-class activities.</td>
</tr>
<tr>
<td>8. I assign homework directly related to dictionary use.</td>
<td>13. I feel capable of teaching students how to use a dictionary.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17. I would recommend that other ESL teachers use dictionaries in their teaching.</td>
<td></td>
</tr>
</tbody>
</table>

**Point scale was reversed**

The point scale for the responses to Questions 13 and 24 were reversed because if students feel that they need more training, this would indicate that they see an area of need in receiving more dictionary use training. Likewise, the point scale for Question 14 for the teacher questionnaire was reversed. If teachers would like to receive more training on how to use dictionaries in their training, they see a deficit in their own training that would reflect the training they deliver in class.

**Glossary Creation Task**

There were 72 total look ups for all participants during the glossary creation task. Of those 72, a majority (67, or 93%) of the total look ups were with online dictionaries. See Table 8 for a breakdown of the type of look up by participant group.
Table 8

*Totals for Types of Look Ups*

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Online Look Ups</th>
<th>Book Look Ups</th>
<th>Total Look Ups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Advanced</td>
<td>23</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>5</td>
<td>72</td>
</tr>
</tbody>
</table>

There were 69 glossary entries total for all participants. The beginner group created 22, the intermediate had 24, and the advanced had 23 total entries. Table 9 shows the frequencies and percentages of the different categories of word information for all three groups.

Table 9

*Frequencies and Percentages of Word Information for Three Groups*

<table>
<thead>
<tr>
<th></th>
<th>Beginner Group</th>
<th>Intermediate Group</th>
<th>Advanced Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Out of 22 total entries</em></td>
<td><em>Out of 24 total entries</em></td>
<td><em>Out of 23 total entries</em></td>
</tr>
<tr>
<td>Definition</td>
<td>22</td>
<td>100%</td>
<td>24</td>
</tr>
<tr>
<td>Part of Speech</td>
<td>9</td>
<td>41%</td>
<td>11</td>
</tr>
<tr>
<td>Example in a Sentence</td>
<td>9</td>
<td>41%</td>
<td>8</td>
</tr>
<tr>
<td>Pronunciation*</td>
<td>6</td>
<td>27%</td>
<td>6</td>
</tr>
<tr>
<td>Translation</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Synonym</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Word Family</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Collocation</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

*Pairs listened to pronunciation of words while looking them up but did not record any information about pronunciation*
For the beginner group, the types of word information included in the glossaries, from most to least common, were: Definition (100% of entries), example in a sentence (41%), and part of speech (41%). No participants in this group wrote or discussed any information that was coded as synonyms, word family, translation or collocation. While none of the participants in this group wrote any information about pronunciation, two of the pairs listened to the pronunciation while looking up some of their items for a total of 27% of look ups. Additionally, only one of the three pairs in the beginner group wrote information about part of speech. They wrote the part of speech for all nine of their entries, but the other pairs wrote nothing related to this category of word information. Figure 1 shows the percentages of each word information category out of the total 22 pieces of word information.

![Figure 1. Percentages of Word Information Types for All Beginner Look Ups](image)

The intermediate group’s word information, from most to least common, were Definition (100% of entries), part of speech (46%), example in a sentence (36%) and pronunciation (25%). No participants wrote information about synonyms, word families, translations or collocations.
One out of the three pairs listened to the pronunciation for 2 out of the 10 words they looked up, but they did not record information about pronunciation in their glossary entries. Figure 2 illustrates the percentages of each word information category as part of the total of 24 pieces of word information.

*Figure 2. Percentages of Word Information Types for All Intermediate Look Ups*

Additionally, the advanced group’s word information, ranked from most frequent to least frequent, was: Definition (100% of entries), part of speech (78%), example in a sentence (30%), and translation (17%), followed by pronunciation, synonym and word family (all 13%), with one entry including a collocation. Figure 3 shows the percentages of each word information category as part of the total of 23 pieces of word information.
Figure 3. Percentages of Word Information Types for All Advanced Look Ups

It should be noted that each of the groups had some look ups (the beginner group: 6, the intermediate: 6, and the advanced: 3) that involved the participants listening to the pronunciation of a word while looking it up with an online dictionary. However, none of the participants recorded this information in their glossary entries.

Table 10 shows the total frequencies and percentages of types of word information for all total look ups for all pairs. While there were 69 look ups total, there were 157 separate types of word information included in the entries that were categorized into the word information categories.
Table 10

*Total Frequencies and Percentages of Types of Word Information*

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>Perc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>69</td>
<td>100%</td>
</tr>
<tr>
<td>Part of Speech</td>
<td>38</td>
<td>55%</td>
</tr>
<tr>
<td>Example in a Sentence</td>
<td>24</td>
<td>35%</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>15</td>
<td>22%</td>
</tr>
<tr>
<td>Translation</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Synonym</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Word Family</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Collocation</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>157</strong></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4 illustrates the percentages of each word information category that composed the total of 157 parts. It demonstrates that the most common categories of word information were definition, example in a sentence and part of speech. Translations, synonyms, word family information and collocations were less frequent.

![Diagram](image.png)

*Figure 4. Percentages of Word Information Types for All Look Ups*
Stimulated Recall

The stimulated recall interviews did not reveal much information about the thoughts processes of the students while using dictionaries nor their strengths or struggles with using dictionaries. The beginner and intermediate pairs mostly repeated simple sentences and did not offer extended answers. Because the researcher could not prod for more of an answer because it could skew the responses, the information collected during this portion was basic.

Two typical responses for the three pairs are given in Table 11.

Table 11

<table>
<thead>
<tr>
<th>Word Information Type</th>
<th>Participants’ Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>“It tells you what means the word so you can read it and understand.”</td>
</tr>
<tr>
<td>Part of Speech</td>
<td>“The part of speech, it’s good for make sentences.”</td>
</tr>
<tr>
<td>Synonym</td>
<td>“(…) gives more information.”</td>
</tr>
</tbody>
</table>

The advanced pair was able to offer more extended responses. They noted that many of the definitions they looked up were confusing and, as one participant said, “Maybe a little bit difficult for Pre-Level 1 students.” As a result, they altered the definitions they recorded in their glossaries to be more comprehensible for the intended audience of lower-level learners.

Student Survey

The student questionnaire data was analyzed for the overall frequencies of responses for questions as well as tests for comparisons of differences between language proficiency groups for the three groups of questions. A one-way ANOVA test of comparisons for the three proficiency levels showed no statistically significant differences for the three groups of questions.
about dictionary use, knowledge/opinions and training. Table 12 presents the mean values and standard deviations for the dependent variable of language proficiency for the student questionnaire.

Table 12

\textit{Descriptive Statistics of Dependent Variable (Language Level) for Student Questionnaire}

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginner</td>
<td>6</td>
<td>1.189</td>
<td>.752</td>
<td>.307</td>
</tr>
<tr>
<td>Intermediate</td>
<td>8</td>
<td>1.138</td>
<td>.563</td>
<td>.199</td>
</tr>
<tr>
<td>Advanced</td>
<td>6</td>
<td>1.342</td>
<td>.388</td>
<td>.158</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>1.214</td>
<td>.600</td>
<td>.125</td>
</tr>
<tr>
<td>Knowledge/Opinion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginner</td>
<td>6</td>
<td>1.930</td>
<td>.813</td>
<td>.332</td>
</tr>
<tr>
<td>Intermediate</td>
<td>8</td>
<td>2.144</td>
<td>.433</td>
<td>.153</td>
</tr>
<tr>
<td>Advanced</td>
<td>6</td>
<td>2.142</td>
<td>.508</td>
<td>.208</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>2.079</td>
<td>.567</td>
<td>.127</td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginner</td>
<td>6</td>
<td>1.389</td>
<td>.430</td>
<td>.176</td>
</tr>
<tr>
<td>Intermediate</td>
<td>8</td>
<td>1.898</td>
<td>.539</td>
<td>.190</td>
</tr>
<tr>
<td>Advanced</td>
<td>6</td>
<td>1.527</td>
<td>.392</td>
<td>.175</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>1.640</td>
<td>.503</td>
<td>.115</td>
</tr>
</tbody>
</table>

Table 13 represents the frequencies and percentages of responses to question #1: “I look up a word using a book and/or online dictionary.”

Table 13

\textit{Frequencies and Percentages for Book and Online Dictionary Use}

<table>
<thead>
<tr>
<th></th>
<th>Freq.</th>
<th>Perc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>Usually</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>Always</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>
For the question about overall dictionary use, no participants reported that they never used dictionaries, and half of the participants reported that they either usually or always use a dictionary to look up words.

Further questions asked specifically about both students’ book and online dictionary use in class and at home as well as for class assignments. Table 14 shows the means and standard deviations for these questions. The responses were on a 5-point scale, with 1 being “strongly disagree” and 5 being “strongly agree.”

Table 14

*Means and Standard Deviations for Dictionary Use Purposes*

<table>
<thead>
<tr>
<th>Use in class</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book dictionaries</td>
<td>1.85</td>
<td>1.226</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>3.35</td>
<td>1.268</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use at home</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book dictionaries</td>
<td>2.35</td>
<td>1.496</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>3.90</td>
<td>1.119</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use for class assignments</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book dictionaries</td>
<td>2.00</td>
<td>1.170</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>3.15</td>
<td>1.182</td>
</tr>
</tbody>
</table>

The means for the online dictionary responses are higher than for the online dictionary responses. The means for the questions about book dictionary use in class, at home and for class assignments are within the range of disagreeing, with mean values of 1.85, 2.35 and 2.00. Meanwhile, the means for the questions about online dictionary use are in the agreeing range for the questions about use in class as well as use for class assignments, with mean values of 3.35 and 3.15, respectively. The mean for online dictionary use at home was 3.9, which is in the range of strongly agreeing.
When it comes to the type of word information students look for when they look up words, students reported with the highest frequency that they look for definition. Definition was followed by pronunciation, part of speech, example in a sentence, spelling and collocation. Table 15 shows the means and standard deviations for Question 2: “When you use a dictionary, what word information do you look for?” The responses were on a 5-point scale, with 1 representing “never” and 5 representing “always.”

Table 15

<table>
<thead>
<tr>
<th>Word Information Type</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>4.00</td>
<td>1.214</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>3.70</td>
<td>0.979</td>
</tr>
<tr>
<td>Part of Speech</td>
<td>3.45</td>
<td>1.317</td>
</tr>
<tr>
<td>Example in a Sentence</td>
<td>3.29</td>
<td>1.056</td>
</tr>
<tr>
<td>Spelling</td>
<td>3.10</td>
<td>1.252</td>
</tr>
<tr>
<td>Collocation</td>
<td>3.00</td>
<td>1.214</td>
</tr>
</tbody>
</table>

The participants reported that they usually look for definitions and pronunciation and that they sometimes look for part of speech, example in a sentence, spelling and collocation.

Table 16 shows responses to the questions about how strongly students like using book and online dictionaries (Questions 8 and 20), how comfortable they are using them (Questions 10 and 21), as well as their amount of knowledge about using them (Questions 9 and 19). The questions were on a 5-point scale with 1 being “strongly disagree” and 5 being “strongly agree.”
Table 16

*Means and Standard Deviations for Book Dictionary Use*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Like using …</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book dictionaries</td>
<td>2.85</td>
<td>0.946</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>4.50</td>
<td>0.946</td>
</tr>
<tr>
<td><strong>Comfortable using …</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book dictionaries</td>
<td>2.85</td>
<td>1.348</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>4.35</td>
<td>0.933</td>
</tr>
<tr>
<td><strong>Know how to use …</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book dictionaries</td>
<td>3.85</td>
<td>1.048</td>
</tr>
<tr>
<td>Online dictionaries</td>
<td>4.45</td>
<td>0.826</td>
</tr>
</tbody>
</table>

Comparisons of the means show that students express a stronger liking for online dictionaries, with a mean value of 4.5 for online dictionaries as opposed to book dictionaries. They also report being more comfortable using online dictionaries (with a mean score of 4.35 for online dictionaries versus 2.85 for book dictionaries). Additionally, students say they have more knowledge about how to use online dictionaries (with a mean value of 4.45) as compared to book dictionaries (mean of 3.85).

**Teacher Questionnaire**

The teacher questionnaire data was analyzed for the overall frequencies of responses for questions as well as comparison testing of differences between teachers with varying lengths of teaching experience. A one-way ANOVA test of comparisons of beginning teachers with more experienced teachers showed no statistically significant differences for the three groups of questions about dictionary use, knowledge/opinions and training. Table 17 gives the mean values and standard deviations for the dependent variable of teaching experience for the teacher questionnaire.
Table 17

**Descriptive Statistics of Dependent Variable (Teaching Experience) for Teacher Questionnaire**

<table>
<thead>
<tr>
<th>Use</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 years</td>
<td>7</td>
<td>1.179</td>
<td>.977</td>
<td>.369</td>
</tr>
<tr>
<td>4-6 years</td>
<td>10</td>
<td>1.667</td>
<td>.800</td>
<td>.253</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>1.466</td>
<td>.883</td>
<td>.214</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge/Opinion</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 years</td>
<td>7</td>
<td>2.238</td>
<td>.317</td>
<td>.120</td>
</tr>
<tr>
<td>4-6 years</td>
<td>10</td>
<td>2.433</td>
<td>.528</td>
<td>.167</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>2.353</td>
<td>.452</td>
<td>.110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 years</td>
<td>7</td>
<td>1.905</td>
<td>.383</td>
<td>.145</td>
</tr>
<tr>
<td>4-6 years</td>
<td>10</td>
<td>1.933</td>
<td>.439</td>
<td>1.389</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>1.922</td>
<td>.404</td>
<td>.098</td>
</tr>
</tbody>
</table>

Table 18 shows the teachers responses to the questions about their personal opinions about dictionaries. The responses were on a 5-point scale with 1 representing strongly disagree and 5 representing strongly agree.

Table 18

**Means and Standard Deviations for Teacher Opinions**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I like dictionaries</td>
<td>4.29</td>
<td>0.772</td>
</tr>
<tr>
<td>11. Dictionaries are useful.</td>
<td>4.59</td>
<td>0.507</td>
</tr>
</tbody>
</table>

The means of 4.29 and 4.59 along with the relatively small standard deviations indicate a strong overall agreement about liking dictionaries and thinking they are useful. However, it would appear from the responses about dictionary use in the classroom that dictionaries are not being used often.
While all the teachers responded “yes” to the first survey question about dictionary use, which posed the question “I have used a dictionary in my ESL class or class,” the responses to Question 5 showed that teachers do not use them often. Table 19 shows the mean and standard deviation for Question 5, “I use a dictionary in the ESL class I teach.” The responses were on a 5-point scale with 1 meaning “never” and 5 meaning “always.”

Table 19

**Mean and Standard Deviation for Teacher’s Dictionary Use in Class**

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I use a dictionary in the ESL class I teach.</td>
<td>2.29</td>
<td>1.047</td>
</tr>
</tbody>
</table>

The mean of 2.29 corresponds to the range of responding “rarely.” This would indicate that teachers do not overall incorporate dictionary use with great frequency in their classrooms.

Table 20 shows the means and standard deviations for the teachers’ responses to the two survey questions about student comfort with and knowledge about using book and online dictionaries. The responses were on a 5-point scale with 1 representing “strongly disagree” and 5 representing “strongly agree.”

Table 20

**Means and Standard Deviations for Student Comfort with and Knowledge about Dictionaries**

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My students are comfortable using …</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Book dictionaries</td>
<td>2.94</td>
<td>0.899</td>
</tr>
<tr>
<td>22. Online dictionaries</td>
<td>3.94</td>
<td>0.556</td>
</tr>
<tr>
<td>My students know how to use …</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Book dictionaries</td>
<td>3.18</td>
<td>0.809</td>
</tr>
<tr>
<td>23. Online dictionaries</td>
<td>3.88</td>
<td>0.600</td>
</tr>
</tbody>
</table>
The teachers’ responses to the questionnaire items indicated that teachers see students as being both more comfortable with and knowledgeable about using online dictionaries. While the mean for the question about students’ comfort level with book dictionaries was within the neutral range (2.94), the mean for the question about comfort with online dictionary use was in the range of agreeing (3.94). The comparison of the means shows that the teachers observe or feel that students are more comfortable with online dictionaries than book dictionaries. At the same time, the responses about student knowledge about the use of book dictionaries were within the neutral range (3.18), while online dictionary use was within the agreeing range (3.88). Comparison of the means show that teachers think that students are better at using online dictionaries as compared to book dictionaries.
CHAPTER V
DISCUSSION

In discussing the results of this study, it is important to return to the research questions formulated before the research was conducted. The questions were:

1. How do learners use dictionaries?
2. Do learners actually do what they report they do in terms of look-up behavior?
3. What training do students receive in dictionary use?

They will be addressed in order. After, pedagogical implications for classroom teachers are discussed. Finally, the researcher will address the limitations of the current study and provide recommendations for future related research.

Question 1: How Do Learners Use Dictionaries?

The study participants mainly used online dictionaries to look up definitions, and, to a lesser extent, parts of speech, examples in a sentence and pronunciation. First of all, the vast majority of the look ups were with online dictionaries. This finding aligns with Tang’s (1997) conclusion that students prefer electronic look up sources because of their portability, speed and variety of features. With the technological skill of today’s college-aged English language learners and their common possession of smart phones with word look up capabilities, it would make sense that learners feel more comfortable using these devices. While some of the lower-level participants used book dictionaries to look up words initially, they also struggled with their use. Their use of the book dictionaries may also not have been an authentic representation of their typical dictionary habits. These lower-level participants also happened to be students taught
by the teacher/researcher. Thus, the students may have been influenced to use something they thought the observing teacher/researcher would prefer them to use.

Furthermore, the teacher responses indicated that they either observed or felt that students were comfortable with and knew how to use online dictionaries but that they were unsure about student comfort with and knowledge of book dictionary use. This is perhaps due to the fact that book dictionaries are not used in classrooms and therefore the teachers have no basis for judging student comfort or knowledge.

From the results of the glossary creation task, it would seem that only a limited number of advanced learners utilize the rich features of a dictionary. Most participants focused on including definitions and examples in a sentence in their glossaries. Some of the participants at each level of proficiency included information about part of speech. The more advanced students included slightly more word information than the less advanced learners, such as synonyms, word family information and collocations, although the number of entries that included these examples was still limited. Fan (2000) found that more advanced language learners could use more of the features of a dictionary because of a greater understanding of not only the words in entries but also of the multiple features of entries. For some participants, but not all, this seemed to be the case.

As for pronunciation, while no pairs recorded phonological information about words in their glossaries, they also infrequently (13% to 25% of all total look ups) listened to the pronunciation of a word while looking it up with an online dictionary. The participants would often repeat the words after listening to their pronunciation, and sometimes they would play the pronunciation more than once. Due to the modality of the study (in which the participants had to
record everything on paper), the students would have had to use some sort of phonological coding system, such as the IPA (International Phonetic Alphabet), to record pronunciation information. However, beyond that, the students did not listen to the words with any great frequency. This was surprising considering that the words were considered unknown to the participants, and part of knowing a word is knowledge of its proper pronunciation. It is possible that the study participants have not been made aware of the importance of developing their knowledge about the pronunciation of words. This aligns with past research that has found that little formal instruction is provided for ESL learners related to pronunciation (Derwing & Munro, 2005). If learners are unaware of pronunciation learning strategies, such as the use of online dictionaries with pronunciation capabilities, these strategies are likely to not be used.

According to the questionnaire results, it appears that students occasionally use dictionaries but not frequently. While Bailey and Onwuegbuzi (2002) found that lower-level foreign language learners do not often use dictionaries to complete their classwork and homework, this study found that students at all levels sometimes use them, but there is little variation in use among the levels. The questions about dictionary use in class, at home and for class assignments revealed that students at all levels report that they only sometimes use online dictionaries in class or for class assignments. Book dictionary use had even lower means, so book dictionaries are not reportedly used. The participants did, however, say that they often used online dictionaries at home.
Question 2: Do Learners Actually Do What They Report They Do In Terms Of Look-Up Behavior?

In considering this question, it is important to look at both the types of dictionaries students used and what types of information they deemed useful in an entry. First of all, students preferred the use of online dictionaries during the glossary creation task, and they also expressed their preference for online dictionaries in the questionnaire. Only 7% (or 5 out of the total 72) of look ups were with book dictionaries during the glossary creation task. Of these, only two of the five were considered efficient, and two of the five look ups were unsuccessful. This data matches the results of the questionnaire in which the participants reported that they rarely used book dictionaries in class, at home or for class assignments.

As for word information, the way that the participants said they used dictionaries in their questionnaire responses did not always match their actual dictionary use. The exceptions were definition and part of speech. All the participants included definitions in their glossary entries, and they also reported that they usually look for definitions when looking up words. As for part of speech, the participants reported that they sometimes look for information about part of speech, and they also used part of speech information in 55% of their look ups. However, while the participants said that they usually use information about pronunciation in dictionary entries, none recorded any information about pronunciation, and only 22% of the look ups included the pairs listening to the pronunciation while looking up an entry online. The modality of the study perhaps meant that students felt that pronunciation information was not important for accomplishing the task of giving word information about words in a text. For example in a sentence, spelling and collocation, the participants
Question 3: What Training Do Students Receive In Dictionary Use?

It would appear that students are not given much training in dictionary use in the classroom. While teachers reported overall in the survey that they liked dictionaries and found them useful, they did not report using them with great frequency in the classroom. If dictionary use is not being spearheaded by the teacher, it would follow suit that the teacher is not training students in their use but instead assuming or hoping that they have the knowledge needed to use them effectively and frequently enough.

Pedagogical Implications

Teachers of ESL students should consider the abilities and needs of their learners related to dictionary use. As Cote González and Tejedor Martínez stated in their 2011 study of their ESL students’ use of dictionaries in class, teachers should conduct ongoing action-research in their classes in regard to their students’ ability to use dictionaries effectively. Questions about the sources students like to use to look up words, when they look up words, and what information they find important when looking up words should be asked. This study found that students prefer online dictionaries to book dictionaries and often do not use all the information available in dictionary entries. Based on the data collected, teachers in this IEP should be incorporating students’ technology, such as smart phones, into explicit instruction as well as into activities about online dictionary use. Teachers could also share the dictionaries and look up sources they like and prefer to use, and those could be explored and mined for the information about words they provide. Al-Amin and El-Sayed (2014) suggested that teachers include task-based activities that offer learners ways to experience the facets of dictionary entries, such as definitions, pronunciations and collocations. For example, it would be beneficial for students to be asked to
look up common collocations for words while completing writing tasks. These activities should be offered on an ongoing basis (Cote González & Tejedor Martínez, 2011; Nation, 2001) throughout the semesters of study in the program. As Cote González and Tejedor Martínez (2011) noted, “It is advisable that students practice these skills at regular intervals throughout their academic life so that the skills acquired can be transferred outside the classroom in an autonomous way” (p. 45).

**Limitations**

A significant limitation to this study was the limited sample size. Because this research was carried out during the summer session of classes, the number of volunteers to be culled from the already-small program was limited. However, since this study involved time-consuming observation, a larger number of participants was not plausible.

**Hawthorne/Halo Effects**

Another limitation was due to the use of observation in this study. With studies that include observation, researchers must be aware of the Hawthorne and halo effects (Gass & Mackey, 2007). These two effects address situations in which study participants are aware that they are being observed by a researcher and are potentially influenced to act in a way that is more satisfactory or closer to what they assume the observer desires. This can produce data that is not reflective of the participants’ true behavior. Unfortunately (but unavoidably), the researcher-observer in this study also taught some of the study participants, which also could have influenced the participants’ actions.
The student participants may also have been affected by their partner. Since they completed the glossary creation task with another student from their language class, they may have been influenced to act in a way that they thought would be desirable to another person.

Suggestions for Future Studies

It would be beneficial for this study to be replicated on a larger scale with more participants and from varying numbers of years of studying English. It would be especially helpful to see how even more advanced students than those included in this study used dictionaries. Language placement scores could be used to place participants into the beginning, intermediate and advanced groups. They would serve as a more exact way of comparing the students. Furthermore, any replications of the survey should be changed so that questions with neutral responses (“Neither agree nor agree”) are removed.

Because the data collected about the training offered by teachers was limited to the responses from the teachers in the survey, another element with open-ended interview questions for the teachers could be added. Possible interview questions include:

1. Do you incorporate book or electronic dictionaries into your teaching? Why or why not? If so, describe what this looks like.

2. How important do you feel it is for students to understand how to use dictionaries, either book or online? Why?

The qualitative data gathered from talking to teachers about their training could offer insights into what is or is not happening in classrooms in regards to dictionary training.
Stimulated Recall

The stimulated recall unfortunately did not reveal much information about the participants’ thought processes during the dictionary look ups and while creating the glossary entries. The participating students tended to say no more than a sentence or two in describing their actions. It is possible that some of this was due to the participants’ lack of familiarity with introspectively about these processes and then vocalizing them. In some cases, the inability of the beginner-level students to communicate fluently in English may have prevented them from sharing more information. Researchers using stimulated recall interviews may want to consider the language levels of their study participants. They may want to seek the use of a translator whom they could train in proper stimulated recall interview protocol to help with the interviews. The ability to communicate in their native language may encourage participants to share more about their internal thought processes as well as their actions.
CHAPTER VI

CONCLUSION

For this population of ESL students, the study determined that students would benefit from more training in how to use the rich information provided in dictionaries. The participants were inclined to mainly find the definitions or examples for words in their look ups. They were less likely to use the ample information included about words, including categories such as part of speech and pronunciation. While it is helpful for language learners to understand receptively what a word means, they must also be able to use it productively. Information about pronunciation and part of speech in an entry can be beneficial for students in terms of their writing and speaking abilities with words. The ability to use words in a clear, comprehensible and grammatically correct way also becomes increasingly important as students advance in their language abilities, so this is an especially necessary focus area for training more advanced ESL students. As Al-Amin and El-Sayed argued in their 2014 study, the dictionary is a useful tool for both weaker and more competent learners because they can continue to “find new ways of exploiting its almost inexhaustible potentials as their language progresses” (p. 1).

Furthermore, as the students demonstrated that they prefer to use online dictionaries, it would be beneficial for teachers to learn about the capabilities of new technology in looking up words and then to train their students in their use. Technologies such as smart phones and dictionary apps make accessing word information a convenient process for many language learners; however, they must understand the wealth of information listed in dictionaries entries as well as how it could apply to their needs and language goals.
References


Appendix A

Example of Dictionary Entry from Oxford Advanced Dictionary for Learners of English

ideal adjective

1 ideal (for something) perfect, most suitable
   • This beach is ideal for children.
   • She's the ideal candidate for the job.
   • The trip to Paris will be an ideal opportunity to practise my French.
   • It was not the ideal solution to the problem.

2 [only before noun] existing only in your imagination or as an idea; not likely to be real
   • the search for ideal love
   • In an ideal world there would be no poverty and disease.

Idioms

in an ideal/a perfect world
used to say that something is what you would like to happen or what should happen, but you know it cannot
   • In an ideal world we would be recycling and reusing everything.
Appendix B
Glossary Creation Task Directions and Version A Text (for beginner group)

Word Explanation Task—Pg. 1
(Version A: For Pre-Level & Level 1 students)

Step 1: Read this text. Look for the words that both you and your partner don’t know. You should find about 5 to 10 words. Underline those words.

Finding the Ideal Job

You don’t have a job. You hate your work. You aren’t satisfied with your career. You are looking for your first job. Where do you start?

If you are like most Americans, you’ll probably send your resume to a lot of companies. You might search for job postings on the Internet or look for ads in the newspaper. But experts say you won’t have much luck. People find jobs only five to ten percent of the time when they use these ways. So what can you do?

One thing you can do is read Richard Bolles’s *What Color Is Your Parachute?* Bolles is an expert in job hunting. He has helped thousands of people find jobs and careers. This book is different from other job-hunting manuals. Bolles doesn’t help you to find just another job. Instead, he helps you find your ideal job: a job that fits you, a job that makes you happy. What kind of job is ideal for you? If you don’t know the answer, Bolles says, you can’t find your ideal job. You need to have a clear picture in your mind of the job you want. The book has many exercises to help you draw this picture.

After Bolles helps you decide on your ideal job, he gives you specific advice on how to find that job. Bolles’s exercises teach you how to find companies and how to introduce yourself. The chapter on job interviews is full of useful information and suggestions. For example, most people go to interviews asking themselves the question, “How do I get the company to hire me?” Bolles thinks this is the wrong question. Instead, he wants you to ask yourself, “Do I want to work here or not?”

(Pg. 5, Q: Skills for Success: Reading and Writing, 2009) 289 words

Word Explanation Task—Pg. 2

Step 2: Now, write a number right above or below each underlined word. You should have about 5 to 10 numbered words.

Step 3: Next, write the numbered words from the text in your notebook. You should write word #1 on the first page, word #2 on the second page, and so on.

Step 4: Now, help me explain each word in your notebook to a Pre-Level 1 IEC student. Work together to look up each word and write down any information about the word that is important for a Pre-Level 1 student to know. You can look up the words with either the Oxford book dictionary or the online Oxford dictionary.
Appendix C

Glossary Creation Task Directions and Version B Text (for intermediate/advanced group)

Word Explanation Task—Pg. 1
(Version B: For Level 3, 4 and 5 students)

Step 1: Read this text. Look for the words that both you and your partner don’t know. You should find about 5 to 10 words. Underline those words.

The Satisfied Learner: How Families Homeschool Their Teens

Maybe it’s the fear of school violence or the lack of stimulating courses, but the number of homeschooling teenagers is on the rise. Some parents balk at the very thought of homeschooling their teen. After all, it’s one thing to teach your daughter how to read. It’s quite another to teach her trigonometry. But the idea that parents are solely responsible for instruction is just one of the many misconceptions about home education. Some other incorrect notions include that homeschooling inevitably leads to social isolation, decreased participation in music and sports, and college rejections letters. The following story about Nikki speaks the truth: Socially and intellectually satisfying, homeschooling is an extremely viable option—for both parent and child.

Nikki Davis, a 16-year-old A and B student in San Diego, California, hated school. Her number one complaint: There was no time for making friends. Academics were also frustrating. She loved biology and longed to experiment with local marine ecosystems, but this year’s curriculum dictated that she memorize plant parts instead. Since seventh grade, she begged her parents to homeschool her. While Susan, Nikki’s mother, agreed with the idea, her father—not unlike many parents who attended public school—resisted. Finally just before her junior year, Nikki’s persistence, as well as her continued unhappiness with school, convinced her father. The Davises decided to try home education. To begin homeschooling, Nikki enrolled in American School, a fully-accredited, independent-study correspondence institution. They outlined the courses she would need to earn a diploma. When Nikki needed help, she phoned or wrote the teachers at American School for consultation.

(Pg. 148-149, Q: Skills for Success 4: Reading and Writing, 2009)
286 words

Word Explanation Task—Pg. 2

Step 2: Now, write a number right above or below each underlined word. You should have about 5 to 10 numbered words.

Step 3: Next, write the numbered words from the text in your notebook. You should write word #1 on the first page, word #2 on the second page, and so on.
Step 4: Now, help me explain each word in your notebook to a Pre-Level 1 IEC student. Work together to look up each word and write down any information about the word that is important for a student to know. You can look up the words with either the Oxford book dictionary or the online Oxford dictionary.
Appendix D

Stimulated Recall Interview Protocol

**Stimulated Recall Directions for Research Participants:**

Now, we’re going to watch the video of you doing the glossary creation task. I’m interested in what you were thinking and doing at the time you were looking up words. You said some things to each other while you were doing the task, but we don’t know what you were thinking. What I’d like you to do, then, is tell me what you were thinking and what was in your mind at that time while you were looking up a word.

Here’s the “stop” button that we can push at any time to pause the video. If you want to tell me something about what you were thinking, you can push “stop.” If I have a question about what you were thinking, then I will push “stop” and ask you to talk about that part of the video.

**Stimulated Recall Instructions for Researcher Collecting Recall Data:**

After reading the instructions to the participants, model stopping the video and asking a question. Choose a segment and stop the video. Ask your question. If one the participants stop the video, listen to what they say. If you stop the video, ask a general question such as:

- What were you thinking here/at this point/right then?
- Can you tell me what you were thinking at this point?
- I see that you look confused/are saying something here. What were you thinking then?

If the participants say “I don’t remember” or “I don’t know,” accept the comment and move on. Prodding for recall comments that were not given promptly by the participants increases the likelihood that the recall comments will be based on what participants think now, some other memory, or a flawed or biased recollection. Try not to focus or direct participants’ answers beyond “what were you thinking then.”

Additionally, the researcher should not give concrete reactions to participants’ responses. Non-responses are preferable. Examples are:

- oh
- mmhmm
- I see
uh-huh

OK

It is important to avoid extended responses. Providing feedback to learners may change the nature of their recall comments. Try not to be a conversational partner but instead an observer who talks little.

If a participant starts talking without stopping the tape, pause the video for them. The audio-taped interview may not be intelligible if the participants are recorded over the original video.
Appendix E

Dictionary Survey for ESL Students

Dictionary Use:
Please check the box that is most true for you.

1. I look up words using a book dictionary and/or online dictionary.
   □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always

2. When you use a dictionary, what word information do you look for?
   a. Spelling (what letters are in the word)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   b. Definition (what the word means)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   c. Example/expressions (the word in a sentence or part of a sentence)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   d. Part of speech (noun, verb, adjective, etc.)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   e. Pronunciation (how to say the word)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   f. Collocations (what other words a word is used with)
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
   e. Other: _____________________________
      □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always

3. When I look up a word in the dictionary, I find it easily and quickly.
   □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always

4. I use a book dictionary in class.
   □ Never   □ Rarely   □ Sometimes   □ Usually   □ Always
5. I use a book dictionary at home.
   □ Never      □ Rarely      □ Sometimes      □ Usually      □ Always

6. I use a book dictionary for IEC class assignments.
   □ Never      □ Rarely      □ Sometimes      □ Usually      □ Always

7. In the past seven (7) days, I used a book dictionary on (check all that are true):
   □ Sunday    □ Monday    □ Tuesday    □ Wednesday    □ Thursday    □ Friday    □ Saturday

   □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

   □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

10. I am comfortable using a book dictionary.
    □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

11. I think book dictionaries are useful.
    □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

12. My teacher taught me how to use a book dictionary.
    □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

13. In the future, I would like to have more training on how to use a book dictionary.
    □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

14. I think I have had enough training on how to use a book dictionary.
    □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

15. I look up words using an online dictionary during class.
    □ Never      □ Rarely      □ Sometimes      □ Usually      □ Always

16. I look up words using an online dictionary at home.
    □ Never      □ Rarely      □ Sometimes      □ Usually      □ Always

17. I look up words using an online dictionary for IEC class assignments.
    □ Never      □ Rarely      □ Sometimes      □ Usually      □ Always
18. In the past seven (7) days, I used an online dictionary on (check all that are true):

☐ Sunday ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday

19. I know how to use an online dictionary.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

20. I like online dictionaries.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

21. I am comfortable using an online dictionary.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

22. I think online dictionaries are useful.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

23. My teacher taught me how to use an online dictionary.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

24. In the future, I would like to have more training on how to use an online dictionary.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

25. I think I have had enough training in how to use an online dictionary.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

Background Information:

Gender: ☐ Male ☐ Female

Level in the IEC: ☐ Pre-Level 1 ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Level 5

Age: ______________________________________

Home country: ______________________________________

First/native language: ______________________________________

Other languages known: ______________________________________

Years spent studying English: ______________________________________

Semesters studying English in the IEC: ______________________________________

Thank you for your participation! 😊
Appendix F

Dictionary Survey for ESL Teachers

Dictionary Use:
Please check the box that best represents your answer. Think about the IEC class/classes that you are currently teaching.

1. I have used a dictionary in my ESL class or classes.
   __ Yes (Go to Question 3)
   __ No (Go to Question 2)

2. I have not used a dictionary because … (check all that apply):
   __ … it is not important.
   __ … I do not know how to incorporate it into my curriculum.
   __ … I do not have one.
   __ … I do not like it.
   __ Other ________________________________________ .

3. Do your students have access to a dictionary?
   __ Yes.
   __ No.
   __ I do not know.

4. I explicitly taught or am teaching my students how to use a collocations dictionary.
   __ Yes.
   __ No.

5. I use a dictionary in the ESL class I teach.
   □ Never □ Rarely □ Sometimes □ Usually □ Always

6. I expect my students to use a dictionary in class.
   □ Never □ Rarely □ Sometimes □ Usually □ Always

7. I expect my students to use a dictionary outside of class.
   □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

8. I assign homework directly related to dictionary use.
   □ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree
9. In the past week, I used the dictionary in (check only one):

__ 0 classes  __ 1 class  __ 2 classes  __ 3 classes  __ 4 classes  __ Other ______________

10. I like dictionaries.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

11. I think dictionaries are useful.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

12. Dictionaries are an important part of the ESL classes I teach.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

13. I feel capable of teaching students how to use a dictionary.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

14. I would like to receive more training on how to use a dictionary in my teaching.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

15. I spend enough class time teaching students how to use a dictionary.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

16. I should use a dictionary for more in-class activities.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

17. I would recommend that other ESL teachers use dictionaries in their teaching.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

18. I would be more likely to use a dictionary in my teaching if … (check all that apply)
   __ . . . if my students brought them to class.
   __ . . . if I had a dictionary application (App) for my smartphone.
   __ . . . if my students showed more interest in using them.
   __ . . . if I were able to collaborate with other ESL teachers who are using them.
   __ Nothing would make me more likely to use it.
   __ Other ____________________________________________________.

19. My students know how to use book dictionaries.
   ☐ Strongly disagree   ☐ Disagree   ☐ Neither agree nor disagree   ☐ Agree   ☐ Strongly agree

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree nor disagree  ☐ Agree  ☐ Strongly agree

21. Students know how to use online dictionaries.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree nor disagree  ☐ Agree  ☐ Strongly agree

22. Students are comfortable using online dictionaries.

☐ Strongly disagree  ☐ Disagree  ☐ Neither agree nor disagree  ☐ Agree  ☐ Strongly agree

Background Information:

Gender: ☐ Male  ☐ Female

Age: ______________________________________________________________

Home country: ______________________________________________________

First/native language: _______________________________________________

Other languages known: ______________________________________________

Number of years teaching ESL (total): _________________________________

Number of years teaching in the IEC: _________________________________

IEC levels and classes you are currently teaching (e.g., Pre-Level Reading/Writing):

_________________________________________________________________

Thank you for your participation! ☺
Appendix G

Consent Letters for Student Participants

Dictionary Use and Preferences of L2 English Learners

INFORMED CONSENT LETTER
(for student participants)

You are invited to participate in a research study investigating pre-university ESL students’ opinions about and skills with using dictionaries. This also includes investigating the training teachers provide in their classes. You were selected as a possible participant in this study because you are currently a student in the Intensive English Center at St. Cloud State University in Level 1, 3 or 5. This study is being conducted by Lori Wolter, a graduate student in the MA TESL program, part of St. Cloud State’s English department, in partial fulfillment of her degree.

Purpose
The purpose of this study is to find out more about how pre-university ESL students and teachers feel about using dictionaries as well as how they use dictionaries inside and outside of the classroom.

Procedure
If you decide to participate, you will sign this consent form and then complete either two or three tasks.

In the first, you will work with a partner to select 5 to 10 unknown words in a text and then look up information about those words. This should take about 30 minutes. This task will be videotaped. You may then be asked to take part in the second task, which is an interview in which we watch the videotape of you and your partner completing the word lookup task. I will ask questions about what you were thinking at different times during the task. This task should take about 45 minutes. It will be audio-recorded.

After, you will be asked to complete a questionnaire composed of 25 questions, which may take about 20 to 30 minutes.

This study carries minimal risks, including the possibility that someone reading the final data report may be able to identify you based on your specific answers. Your name will be kept confidential and will not be published anywhere. After the final report is complete, your survey will be destroyed.

Risks
The risks in this study are minimal. If you feel nervous or experience any discomfort while completing the word lookup task, the interview, or the questionnaire, you may withdraw at any time.

Benefits
There is minimal benefit to you for participating in this study. You may gain insight into the ways you use and think about dictionaries. Your participation may also benefit future ESL students and teachers by contributing to the overall understanding of how dictionaries are used.
Confidentiality

Your name will be kept confidential and will not be published anywhere. You will not be identified in the final report. All written and digital data will be destroyed after my degree is awarded. The audio and video recordings will only be used for analysis purposes and will not be shared with anybody else. To prevent identification of research subjects, your name will NOT be used after the data have been recorded for analysis. Results will be presented in aggregate form with no more than 1-2 descriptors presented together. People will be able to access to my thesis through SCSU. I may share my results and findings in ways including but not limited to presentations in conferences, publication of articles or books based on this research.

Contact information

Feel free to ask any questions now. If you have any questions or concerns later, you may email me at wolo1101@stcloudstate.edu or my advisor, Dr. Choonkyong Kim, at ckim@stcloudstate.edu. You will be given a copy of this form for your records. If you would like to know the result of this research, please write down your email address at the end of this consent form. I will send you a summary of the final study results by email when it is completed.

Voluntary Participation/Withdrawal

Participation is voluntary. Your decision about whether or not to participate will not affect your current or future reputation or relations with me; my advisor, Dr. Choonkyong Kim; St. Cloud State University; the Intensive English Department, or SCSU’s English Department. It is acceptable to withdraw from the study at any time, including after finishing the word lookup task, the interview, or the survey. You do not have to complete every question on the survey. If you do not provide an answer for every question, your survey might not be used in the final report.

Acceptance to Participate

Your signature indicates that you are at least 18 years of age; you have read and understood the information provided above, and you have consented to participate. You may withdraw from the study at any time without penalty after signing this form.

Subject Name (Printed) __________________________

Subject Signature __________________________

Date __________________________

Yes, I would like to know the results of this thesis. Please send me an email.

Email __________________________

Researcher Name (Printed) __________________________

Researcher’s Signature __________________________

Date __________________________

Thank you for your participation! 😊
You are invited to participate in a research study investigating pre-university ESL students’ opinions about and skills with using dictionaries. This also includes investigating the training teachers provide in their classes. You were selected as a possible participant in this study because you are currently teaching in the Intensive English Center at St. Cloud State University. This study is being conducted by Lori Wolter, a graduate student in the MA TESL program, part of St. Cloud State’s English department, in partial fulfillment of her degree.

Purpose
The purpose of this study is to find out more about how pre-university ESL students and teachers feel about using dictionaries as well as how they use dictionaries inside and outside of the classroom.

Procedure
If you decide to participate, you will sign this consent form and be asked to complete a questionnaire composed of 22 questions, which may take about 10 to 20 minutes. This study carries minimal risks, including the possibility that someone reading the final data report may be able to identify you based on your specific answers. Your name will be kept confidential and will not be published anywhere. After the final report is complete, your survey will be destroyed.

Risks
The risks in this study are minimal. If you feel nervous or experience any discomfort when you are completing the questionnaire, you may withdraw at any time.

Benefits
There is minimal benefit to you for participating in this study. You may gain insight into the ways you teach and the ways in which your students use dictionaries. Your participation may also benefit future ESL students and teachers by contributing to the overall understanding of how dictionaries are used.

Confidentiality
Your name will be kept confidential and will not be published anywhere. You will not be identified in the final report. All written as well as digital data will be destroyed after my degree is awarded. To prevent identification of research subjects, your name will NOT be used after the data have been recorded for analysis. Results will be presented in aggregate form with no more than 1-2 descriptors presented together. People will be able to access to my thesis through SCSU. I may share my results and findings in ways including but not limited to presentations in conferences, publication of articles or books based on this research.

Contact information
Feel free to ask any questions now. If you have any questions or concerns later, you may email me at wolo1101@stcloudstate.edu or my advisor, Dr. Choonkyong Kim, at ckim@stcloudstate.edu. You will be given a
copy of this form for your records. If you would like to know the result of this research, please write down your email address at the end of this consent form. I will send you a summary of the final study results by email when it is completed.

**Voluntary Participation/Withdrawal**

Participation is voluntary. Your decision about whether or not to participate will not affect your current or future reputation or relations with me; my advisor, Dr. Choonkyong Kim; St. Cloud State University; the Intensive English Department, or SCSU’s English Department. It is acceptable to withdraw from the study at any time, including after finishing the survey. You do not have to complete every question on the survey. If you do not provide an answer for every question, your survey might not be used in the final report.

**Acceptance to Participate**

Your signature indicates that you are at least 18 years of age; you have read and understood the information provided above, and you have consented to participate. You may withdraw from the study at any time without penalty after signing this form.

Subject Name (Printed) ________________________________

Subject Signature______________________________________

Date___________________________________________________

Yes, I would like to know the results of this thesis. Please send me an email.
Email__________________________________________________

Researcher Name (Printed) ________________________________

Researcher’s Signature____________________________________

Date____________________________________________________

Thank you for your participation! 😊