The Impact of Time on English Language Learners’ Vocabulary Size

Deqa Yusuf
St. Cloud State University

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

Recommended Citation
https://repository.stcloudstate.edu/engl_etds/127

This Thesis is brought to you for free and open access by the Department of English at theRepository at St. Cloud State. It has been accepted for inclusion in Culminating Projects in English by an authorized administrator of theRepository at St. Cloud State. For more information, please contact rswexelbaum@stcloudstate.edu.
The Impact of Time on English Language Learners’ Vocabulary Size

by

Deqa Yusuf

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 Teaching English as a Second Language

May, 2018

Thesis Committee:
Choonkyong Kim, Chairperson
Michael Schwartz
Semya Hakim
Abstract

This study investigates the Level of receptive vocabulary knowledge of English language learners at different Levels of proficiency at a large mid-western university. The 111 participants in this study were international students from various first language backgrounds, who were enrolled in pre-college intensive English courses. The study used a yes/no vocabulary test known as the Vocabulary Size Test (Meara, 1992) to measure students’ receptive vocabulary knowledge. Items in the yes/no test consist of 40 real words and 20 pseudo words. This assessment provided a rough estimate of each learner’s lexical profile. In addition to the yes/no test, learners were surveyed to determine if there was a correlation between their vocabulary size and the specific vocabulary learning strategies, their daily use and practice of English, self-monitoring learning, goals, and motivation. A paired samples t-test was used to compare pre-and post-test for the first 1,000 (1K), the second 1,000, the third 1,000 (3K), and AWL. The results suggest that pre-test and post-test for 1K and 2K, participants show some improvement in increasing their receptive vocabulary size. Also, participants who took 3K and AWL pre-test and post-test show significant improvement in their vocabulary size. In addition, there is no significant relationship between improvement and survey strategy answers. Based on the study’s results, pedagogical recommendations were made to help participants increase their vocabulary size.
Acknowledgments

Firstly, I would like to express my gratitude to Allah (God) for giving me the determination, strength, and perseverance to complete my MA TESOL program and K-12 ESL teaching license. I would like to also offer my special thanks to Dr. Choonkyong Kim, my thesis advisor, for her help, guidance, and patience with my thesis project. Dr. Kim’s willingness to give her time and constructive suggestions throughout the development of this thesis project has been greatly appreciated. In addition, advice given by my other two members of the thesis committee, Dr. Michael Schwartz and Dr. Semya Hakim were greatly appreciated. I am grateful for their words of encouragement. I wish to acknowledge the helped provided by Lydia Dieterich with the management and organization of my thesis data. This part of my thesis project was challenging for me, and she was there to assist with organizing a massive amount of data. I would also like to extend my thanks to my friends Shaya Kraut and Shukria Omar for editing my thesis paper and offering helpful feedback to make improvement. Finally, I like to thank my family as a whole and more specifically my mother. I thank my family for supporting me by babysitting my children and offering words of encouragement. I thank my mother for encouraging me, praying for me, and reminding me to finish my thesis.
Table of Contents

List of Tables .......................................................................................................................... 7
List of Figures .......................................................................................................................... 8
Chapter

I. Introduction ............................................................................................................................. 9
   Background and Need for this Study .................................................................................... 10
   Purpose of the Present Study ............................................................................................... 12
   Research Questions .............................................................................................................. 13

II. Literature Review ................................................................................................................ 14
   The Role of Vocabulary Size in L2 Reading and Listening ................................................ 14
   Types of Vocabulary ............................................................................................................ 17
   High Frequency Words ........................................................................................................ 18
   Academic Vocabulary .......................................................................................................... 19
   Receptive vs. Productive Vocabulary ................................................................................... 19
   Definition and Vocabulary Knowledge ................................................................................ 20
   Strategies ............................................................................................................................... 21
   Motivation in Second Language Learning .......................................................................... 27
   Measurement of Vocabulary Size ....................................................................................... 29
   How the Yes/No Test Was Developed and Used ............................................................... 30
   The Benefits and Limitations of the Yes/No Test ............................................................. 31
Chapter III. Methodology ........................................................................................................................................... 33
   Participants .......................................................................................................................................................... 33
   Materials ......................................................................................................................................................... 33
   Procedure ......................................................................................................................................................... 34
IV. Data Analysis and Results .................................................................................................................................... 38
   Quantitative Analysis: Vocabulary Size Test ....................................................................................................... 38
   Comparison of Results between Levels .............................................................................................................. 40
   Change in Vocabulary Size (Pre-test and Post-test Differences) ........................................................................... 43
   Yes/No Test Correlation with Survey ................................................................................................................ 46
   Analysis of Survey .............................................................................................................................................. 47
V. Discussion ............................................................................................................................................................. 49
   Research Question 1 ........................................................................................................................................ 49
   Research Question 2 ........................................................................................................................................ 51
   The Importance of Measuring Learners’ Vocabulary Size .................................................................................... 53
   How the Yes/No Test can be used as Placement Tool in IEP ............................................................................ 54
   Practical Implications ....................................................................................................................................... 55
   Limitations of the Study .................................................................................................................................... 56
   Suggestions for Future Research ........................................................................................................................ 57
VI. Conclusion ......................................................................................................................................................... 58
Chapter

References ..............................................................................................................................................59

Appendices

A. Yes/No Test ......................................................................................................................................62
B. Survey Questionnaire .....................................................................................................................64
C. Informed Consent Form ..................................................................................................................75
D. IRB Expedited Review Approval Signature Page ............................................................................76
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What Is Involved in Knowing a Word</td>
<td>21</td>
</tr>
<tr>
<td>2. Tests and Survey Taken by Participants in Each Level</td>
<td>36</td>
</tr>
<tr>
<td>3. One Way ANOVA Analysis of 1K Pre-test</td>
<td>41</td>
</tr>
<tr>
<td>4. One Way ANOVA Analysis of 2 K Pre-test</td>
<td>42</td>
</tr>
<tr>
<td>5. Independent Samples T-Test for Pre- and Post-test</td>
<td>43</td>
</tr>
<tr>
<td>6. Summary of Paired Samples T-Test Pre- and Post-test</td>
<td>46</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learners’ Pre-test Vocabulary Size</td>
<td>39</td>
</tr>
<tr>
<td>2. Learners’ Post-test Vocabulary Size</td>
<td>40</td>
</tr>
<tr>
<td>3. Learners’ Pre-test and Post-test Vocabulary Size</td>
<td>43</td>
</tr>
</tbody>
</table>
Chapter I: Introduction

“Vocabulary enables us to interpret and to express. If you have a limited vocabulary, you will also have a limited vision and a limited future.” -- Jim Rohn

One of the first steps of learning English is learning vocabulary. A person’s vocabulary size is the set of words they know. Having a large vocabulary size is a useful tool for speaking, listening, reading, and writing. A great challenge second language learners face is acquiring extensive vocabulary knowledge. There are many different aspects to knowing a word. According to Nation (2001), “At the most general Level, knowing a word involves form, meaning and use” (p. 48). When evaluating vocabulary knowledge, educators must make a distinction to determine whether the knowledge is receptive or productive. Receptive knowledge consists of words that learners understand when they see or hear them; productive knowledge consist of words that learners use and produce to express themselves in verbal or written form in different contexts.

In second language learning, knowledge of vocabulary greatly impacts both receptive and productive skills. Many Intensive English Programs (IEP) offer vocabulary classes for English language learners to help them speed up their development of reading, listening, and comprehension. Based on his research, Nation (2001) believes that minimally, a second language learner needs to have knowledge of the first 3,000 high-frequency English words to read 95% of words they encounter.

In addition to the first 3,000 high-frequency words, international students who are studying English abroad for the purpose of entering a university must also learn the Academic
Word List (AWL) vocabulary to become successful at university-Level classes (Coxhead, 2000). The AWL words, which Coxhead compiled from a corpus study of academic textbooks and lectures, are made up of 570 word families. These words occur in all subjects; therefore, it is extremely important for a second language learner in any major to master them (Coxhead, 2000).

**Background and Need for this Study**

In a Vocabulary Acquisition course, I was required to complete a small-scale pilot study for a vocabulary research project. I realized that there had not been a study that attempted to determine international students’ vocabulary size in the Intensive English Program (IEP) where I taught English. For these students who came to the United States to study for professional careers, their main goal was to improve their linguistic proficiency as quickly as possible. It takes resources such as money and time to study English abroad. These international students I taught studied hard for their English classes, but many still struggled because their vocabulary knowledge was inadequate. I became curious about these students’ Level of vocabulary knowledge and decided to measure their vocabulary size. My research question was “What is the vocabulary size of IEP students?” I investigated their current vocabulary size at different placement Levels because “it is thus very important to know where learners are in their vocabulary knowledge so that an appropriate vocabulary-learning program can be designed” (Nations, 2001, p. 516).

The setting of this study was specific to international students in an IEP. In the IEP, a placement test is given to all students, and they are placed in one of six English proficiency Levels (Pre-Level to Level 5) according to the results of the placement test. These placement
tests consist of reading, listening, and writing, but there is no section that specifically tests vocabulary. Student also take an exit test at the end of the semester. These students receive between 21 and 23 hours of English language instruction a week. The purpose of this study was to provide information that might help instructors of IEP to meet their international students’ vocabulary needs.

From the results of the pilot study, I learned that IEP students estimated receptive vocabulary knowledge was less than 50% of high-frequency words. At the time of the research project, all IEP students were receiving two hours of vocabulary lessons per week. After analyzing the results, I learned that IEP students’ receptive vocabulary knowledge was significantly lower than expected. After the results of the receptive vocabulary size test were shared with the program supervisor, he made some changes to the vocabulary courses for the upcoming semesters. Instead of getting two hours of vocabulary lessons per week, in the following semesters, students from Pre-Level to Level 3 began receiving vocabulary lessons four hours per week. Students were spending more time studying and increasing their vocabulary knowledge. These events made me realize that this research was very important and I also became interested in conducting a larger scale study. I thought it would be helpful to look at pre-test and post-test data to measure IEP students’ vocabulary size.

In my Vocabulary Acquisition class, I also learned the importance of vocabulary learning strategies and how they can help students acquire vocabulary knowledge. There are so many words to learn and not enough time to learn them all in the classroom setting; therefore, the vocabulary learned in the classroom is insufficient for English Language learners. Waring and
Nation (1997) suggested that not only should language teachers prioritize teaching high frequency words, but they must also help learners develop strategies that will assist them to continue learning new vocabulary and increase their vocabulary size. According to Hamza, Kafipiur and Abdullah (2009), “the understanding of the students’ beliefs of vocabulary learning and their vocabulary learning strategies use enables teachers and researchers to design appropriate materials and activities to help them improve their vocabulary learning so as to enhance their lexical competence” (p. 41). Therefore, it is crucial for students to know the importance of vocabulary learning strategies and how they can assist them to build their own vocabulary knowledge.

**Purpose of the Present Study**

After conducting the pilot study, I decided to conduct a larger scale study that would include vocabulary learning strategies. The purposes of the present study were to: (a) find rough estimates of learners’ total vocabulary size, which can be used to set learning goals for international students attending IEP; and (b) investigate if there are possible correlations between learners’ yes/no test scores with their survey scores.

Vocabulary knowledge has two dimensions: breadth and depth. According to Moghadam, Zainal, and Ghaderpour (2012), “breadth of vocabulary knowledge is referred to the quantity or number of words learners know at a certain Level of language competence while depth of knowledge is a network of links between words” (p. 558). It is important to investigate the vocabulary size (breadth of vocabulary knowledge) of second language learners in order to plan effective vocabulary courses. For teachers teaching at IEPs who are planning curriculum, their
main concern at the beginning of the semester is the breadth of vocabulary knowledge. An effective starting point is to set reasonable vocabulary learning goals. Before setting goals however, teachers need to determine what percentage of high frequency words learners know: hence, teachers are looking for breadth of vocabulary knowledge. Ideally, the test given to learners must be quick to take, easy to mark and easy to interpret. One test that meets these criteria is a vocabulary size test called Yes/No test. Yes/no test was chosen to measure receptive vocabulary size because it is a reliable and inexpensive assessment.

**Research Questions**

This study aims to answer the following questions:

1. How does the size of learners’ high frequency receptive vocabulary knowledge change over two semesters?
2. What factors are associated with individual differences in vocabulary growth?
Chapter II: Literature Review

Past researchers focus on variety of topics related to vocabulary such as the role of and measurement vocabulary size, types of vocabulary knowledge, and language and vocabulary strategies to develop and increase vocabulary knowledge. In addition, they investigated the role of motivation in second language learning.

The Role of Vocabulary Size in L2 Reading and Listening

Nation (2006) explored how vocabulary knowledge is used for different purposes by second language learners. Generally, vocabulary development takes place in four basic language skills: listening, speaking, reading, and writing. Growth in these skills depends partly on vocabulary size. Researchers have discussed the number of words needed to understand written and spoken language. The role of vocabulary size in reading is very important. Second language learners cannot understand what they are reading without knowing what most of the words mean in a text. In addition, vocabulary is essential for reading comprehension. Nation (2006) investigated the receptive vocabulary needed for “reading a novel, reading a newspaper, watching a movie, and taking part in a conversation” (p. 59). Nation (2006) wanted to answer the question: How much vocabulary do non-native speakers need in order to be able to read books and understand movies and conversations?

There are many ways to figure out how many words a second language learner needs to know in order to understand written and spoken language. One method is to figure out how many words are in the English language and set that as a learning goal (Nation, 2006). There are studies that actually research this method, and they came up with the estimate of the figure
114,000 word families (Goulden, Nation, & Read, 1990). Since even native speakers of English do not know all the words in the English language, it would be unrealistic to expect second language learners to learn them all. A second method is estimating how much vocabulary a native speaker knows and use that as the learning target goal (Nation, 2006). Again, there are many studies that investigated how much vocabulary native speakers know. According to Nation (2006), “reasonably conservative estimates from studies that have used a sound methodology indicate that well-educated native speakers know around 20,000 word-families. As a rule of thumb, one year of life equals 1,000 word-families up to the age 20 or so” (p. 60). Also, there are studies that investigated the vocabulary size of second language learners who are obtaining advanced degrees using English. Their receptive vocabulary size is around 8,000-9,000 word-families (Nation, 2006). This is a feasible learning goal for all second language learners.

Nation (2006) also asked the question of “what amount of text coverage is needed for adequate comprehension to be likely to occur. Putting it another way, how much unknown vocabulary can be tolerated in a text before it interferes with comprehension?” (p. 61). Nation answered his question based on his research. He concluded that “a vocabulary of 8,000 to 9,000 words is needed to read a novel, and even then, 1 word in 50 will be unfamiliar. A similar vocabulary size of around 8,000 to 9,000 words is needed to read newspapers” (pp.71-72). He further stated that 95% of text coverage provides basic understanding while 98% provides adequate coverage (Nation, 2006). Earlier, I mentioned that having knowledge of the first 2,000 and 3,000 high-frequency words provides core vocabulary needed to understand 80% of written
and spoken words. According to Nation (2006), the ultimate goal for second language learners is to have the vocabulary size of 8,000-9,000.

Nation (2006) also asked the question “How many word-families do you need to know to be familiar with most words in a children’s movie?” (p. 73). He investigated the vocabulary size needed to comprehend the children’s movie *Shrek*. Every children’s movie is different in terms of vocabulary Levels and use. Nation (2006) found that:

With a vocabulary of 4,000 word-families, and assuming that proper nouns are easily understood, 96.70% of the tokens would be familiar to children watching the movie. This means that there would be 1 unknown word in about every 30 running words. With a vocabulary of 7,000 words plus proper nouns, 98.08% of the tokens would be familiar to children watching the movie. This means there would be 1 unknown word in about every 50 running words. (p. 75)

The advantage of watching movies is that they are visual, and the disadvantage is that they use spoken language. To emphasize this point, Nation (2006) stated, “These vocabulary sizes are not essential for watching and enjoying *Shrek*. Two-year-olds watch *Shrek* with pleasure and get absorbed in the movie” (p. 76). A person can enjoy a movie without understanding every word. However, to truly understand the whole movie of *Shrek*, knowledge of the first 7,000 words plus proper nouns is required.

Another aspect of oral language that Nation (2006) discussed is the difference between scripted and unscripted language. For example, books use scripted language while conversations lack structure and are unplanned. Nation (2006) asked, “How many words do you need to cope
with unscripted spoken English?” (p. 77). One of his findings was that spoken language used more high frequency words than written language.

A summary of Nation’s (2006) findings is that “8,000-9,000 word-family vocabulary is needed for dealing with written text, and 6,000-7,000 families for dealing with spoken text” (p. 79). A person cannot learn a language without learning its words. Acquiring large vocabulary is necessary in order to understand a wide range of oral and written language without assistance.

**Types of Vocabulary**

According to the *Cambridge Dictionary*, vocabulary refers “to the words used in a language” and it has three different meanings: (a) all the words you know in particular language, (b) all the words that exist in a language, and (c) a list of words and their meanings” (Vocabulary, n.d.). Vocabulary development is a critical aspect of learning a second language. There are many different types of vocabulary a second language learner needs to know. This thesis focuses on two types of vocabulary ESL students need in order to successfully complete an undergraduate degree in a university. This research will investigate the current Levels of high frequency and academic vocabulary knowledge of international students. This does not mean that English language learners only need vocabulary to be successful in a university setting. Knowledge of vocabulary supports all areas of English language learning. The high frequency words families and AWL knowledge is important because these two types of vocabulary are needed in order to succeed in an academic setting. Knowledge of other vocabulary types will also be beneficial.
**High Frequency Words**

The first high frequency words list, known as the General Service List of English words (GSL), was created by Michael West in 1953. The words in this list are the most frequent words in English, and they are from written corpus study. According to Nation (2006):

Knowing about 2,000 word families gives near to 80% coverage of written text. The good news for second language learners and second language teachers is that a small number of the words of English occur very frequently and if a learner knows these words, that learner will know a very large proportion of the running words in a written or spoken text. (p. 2)

Knowledge of high frequency words is the foundation for English language learning because “a vocabulary size of 2000 to 3000 words provides a very good basis for language use” (Waring & Nation, 1997, p. 3). High frequency vocabulary should be given preference because it consists of words that are used most frequently in the English language. Then the question is what other vocabulary do second language learners need beyond the 2,000 high frequency words? If the second language learners planned to study in a university, then they need academic vocabulary such as the AWL.

The GSL is criticized for its lack of contemporary words. It has not been updated with “modern” words that fit into its “sound selection criteria”, and that is its main shortcoming (Read, 2007). However, it is the best frequency list available. This study used words from the GSL list to assess international students’ receptive vocabulary size to determine how many words they recognized and understood. It is important to find rough estimates of learners’ total
vocabulary size. This information can then be used to set learning goals for international students attending IEPs.

**Academic Vocabulary**

ESL students need to acquire knowledge of Academic Word List (AWL) vocabulary to become successful in an academic setting (Coxhead, 2000). The AWL makes up for the shortcoming of the GSL by using modern words and “sound selection criteria.” These two lists can provide the most useful information about learners’ vocabulary size:

The 2000 list and the AWL together, a combined list of 2570 words, can bring the coverage of an academic text up to approximately 90%. In other words, if you know the first 2000 plus 570 AWL words, then you know about 90% of the words you will meet in any academic text. For the rest of the journey (90% to 95%), for the moment you are pretty much on your own. But you have an adequate base for inferences and look-ups.

(Lexical Tutor, 1998)

Knowledge of high frequency word families and AWL will provide second language learners with a basic understanding of the English language. Learners will need vocabulary learning strategies and motivation to continually increase their vocabulary knowledge.

**Receptive vs. Productive Vocabulary**

When evaluating vocabulary knowledge, we must make a distinction to determine whether the knowledge is receptive or productive. Receptive knowledge includes words that learners understand when they see or hear them; productive knowledge is when learners use and produce vocabulary to express themselves in verbal or written form in different contexts.
In second language learning, knowledge of vocabulary greatly impacts both receptive and productive skills.

**Definition and Vocabulary Knowledge**

Learning vocabulary is necessary when learning another language. Without vocabulary, people cannot communicate with each other or express their ideas. When visiting another country or learning another language, most people buy dictionaries because they understand that they need vocabulary to convey their ideas to others. Once a person identifies what words are useful to know, then the question becomes what it means to actually know a word.

**Knowing a word.** According to Nation (2001), word knowledge can be categorized into form, meaning, and use. Form includes pronunciation (spoken), spelling (written), and word parts (prefix, suffix). Meaning includes association, concepts and referent. Use comprises grammatical functions, collocations, and constraints. As can be seen in Table 1, there are many components to what it means to know a word, and Nation provides the most complete description of word knowledge. These three different aspects of word knowledge can help increase vocabulary knowledge and use for second language learners. There is so much to learn about each word, and it is a gradual process. It takes knowledge of strategies and motivation to continually acquire knowledge about each individual word. In conclusion, gaining vocabulary knowledge is not an all or nothing process but rather a gradual and systematic process.
Table 1.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Component</th>
<th>Receptive Knowledge</th>
<th>Productive Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>spoken written word parts</td>
<td>What does the word sound like?</td>
<td>How is the word pronounced?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What does the word look like?</td>
<td>How is the word written and spelled?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What parts are recognizable in this word?</td>
<td>What word parts are needed to express the meaning?</td>
</tr>
<tr>
<td>Meaning</td>
<td>form and meaning concepts and referents associations</td>
<td>What meaning does this word form signal?</td>
<td>What word form can be used to express this meaning?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is included in this concept?</td>
<td>What items can the concept refer to?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What other words does this make people think of?</td>
<td>What other words could people use instead of this one?</td>
</tr>
<tr>
<td>Use</td>
<td>grammatical functions collocations constraints on use (register, frequency . . .)</td>
<td>In what patterns does the word occur?</td>
<td>In what patterns must people use this word?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What words or types of words occur with this one?</td>
<td>What words or types of words must people use with this one?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where, when, and how often would people expect to meet this word?</td>
<td>Where, when, and how often can people use this word?</td>
</tr>
</tbody>
</table>

Source: Adapted from Nation (2001, p. 27)

Strategies

Language learning strategies. Some second or foreign language learners are more successful learning the English language than others. Many international students come to the United States to improve or develop their English language so they can attend university.

However, success with the English language depends on many factors. One of those factors is having effective language learning strategies. What are language learning strategies? According to Oxford (1994), “Foreign or second language (L2) learning strategies are specific actions, behaviors, steps, or techniques students use—often consciously—to improve their progress in
apprehending, internalizing, and using the L2” (p. 1).” Also, Rubin (1975) defined strategies as “the techniques or devices which a learner may use to acquire knowledge” (p. 43). Some examples of language learning strategies are seeking opportunities to interact with native speakers of English, using words in different contexts, making lists of new words, and reviewing these words consistently. Individuals who use language learning strategies are actively and directly involved in learning the language. This is important because “research has repeatedly shown that the conscious, tailored use of such strategies is related to language achievement and proficiency” (Oxford, 1994, p. 1). According to research, successful language learners use effective strategies to improve their proficiency Level by picking strategies that go well with the language task. They select language learning strategies that are effective together such as combining cognitive and metacognitive strategies instead of using one type of strategy (Oxford, 1994). The following are the strategies successful language learners used consistently according to Rubin (1975):

1. The good language learner is a willing and accurate guesser.
2. The good language learner has a strong drive to communicate, or to learn from a communication.
3. The good language learner is often not inhibited.
4. In addition to focusing on communication, the good language learner is prepared to attend to form.
5. The good language learner practices.
6. The good language learner monitors his own and the speech of others.
7. The good language learner attends to meaning. (pp.45-48)

There are many factors that impact the particular strategies selected and used in learning a second language. Some of those important factors mentioned by Oxford (1994) include cultural background, motivation, gender, age, attitudes and beliefs, and learning styles. In his article, Rubin (1975) discussed good language learners versus poor language learners. He believes what differentiates these learners is their use of language learning strategies. Second language learners’ use of language learning strategies will vary based on factors such as age, language task, learning stage, and context (Rubin, 1975). He investigated the strategies successful language users employ to understand what they do differently compared to poor language learners. He stated:

By looking at what is going on inside the good language learner, by considering how he is successful, what strategies, what cognitive processes he uses to learn a language, we may be led to well-developed theories of the processing of linguistic information which can be taught to others. (p. 49)

By learning the techniques, the successful learners use and implementing them, poor language learners can have greater success learning the second language.

**Vocabulary learning strategies.** Building one’s vocabulary is essential to improving one’s communication, production, and comprehension skills. Second language learners face multiple challenges in developing essential skills such as vocabulary, reading, writing, speaking, and listening. This literature review will focus on vocabulary strategies that successful second language learners use to develop vocabulary. Second language learners need a large vocabulary
size and they must know the first 3,000 high frequency words to minimally understand basic English text (Nation, 2001). Therefore, learners who have a large vocabulary at their disposal are generally more successful at learning than those who do not. This leads to the questions: What strategies are the successful language learners using? Can less successful learners use these strategies to improve their language learning goals?

There are numerous studies on the subject of vocabulary strategies. When second language learners approach the challenging task of learning vocabulary, they adopt certain strategies depending on their prior knowledge and the learning environment. In the article Adult Learners’ approaches to learning vocabulary in second language, Sanaoui (1995) focused on vocabulary learning strategies by evaluating the learning behaviors of second language learners. In her study, she “seeks to obtain comprehensive accounts of learners’ approaches to vocabulary study” (p. 16). She conducted a study using 50 adults who were English as a second language (ESL) learners in an intensive ESL program in Canada. These learners were taking several English classes such as vocabulary, reading, writing, speaking, and listening. They were from various backgrounds both linguistically and culturally. Their tasks for six weeks were to “(a) monitor and document daily the approaches they took to the task of vocabulary learning, and (b) report on and discuss features of their individual approaches with other participants” (Sanaoui, 1995, p. 16).

Sanaoui (1995) analyzed the written records of the participants and their vocabulary study habits to figure out their vocabulary learning strategies. The results of the study showed that there were two types of learners. “The first type of learners approached vocabulary learning
systematically, while the second type did not” (Sanaoui, 1995, p. 16). For example, the first type of learners used strategies such as setting goals and consistently keeping a record of written vocabulary. However, “the second type of learners approached vocabulary learning with “no clear routines or intentions” (Sanaoui, 1995, p. 17).

A follow-up case study of four ESL students was conducted to verify the results from the first study. The learners in the case study were international students who came to Canada to improve their English language so that they would have good careers in their home country. “For four weeks, subjects documented their approach to vocabulary learning daily (Sanaoui, 1995, p. 17). They were asked to “keep records of vocabulary items they were learning and to describe specific mnemonic procedures that they used for retaining those words” (Sanaoui, 1995, p. 17). In addition, subjects were interviewed regarding their vocabulary learning strategies.

Sanaoui created a profile for each subject based on his or her approach to vocabulary learning. The following components were included in each profile: the nature and purposes of the activities in which the learner engaged, number and frequency of activities, amount of time spent on vocabulary study each week, sources of new lexical items, nature and purpose of notes the student had made, kinds of lexical items each student reported learning, mnemonic procedures used, type of dictionary used, and patterns of dictionary use. (p. 17)

Three out of the four subjects were systematic about their approach to vocabulary learning. They reviewed written records of their vocabulary regularly. The fourth participant did
not approach vocabulary learning systematically. Sanaoui (1995) listed some mnemonic strategies successful vocabulary learners use to retain vocabulary terms:

- **Writing**: The learner writes down the vocabulary to remember it.
- **Immediate repetition**: the learner repeats the vocabulary out loud to himself or herself several times to become familiar with it.
- **Using the lexical item**: the learner uses the word in a sentence or in a conversation with others.
- **Contextual association**: the learner connects the word with an event or situation they know.
- **Linguistic association**: the learner translates the word in his or her L1.
- **Imagery**: the learner connects the word with a picture in his or her mind.
- **Talking about the lexical item with someone**: the learner discusses the vocabulary with someone. (p. 24)

These are just some of the strategies that successful learners implement while learning vocabulary. This study investigates how learners develop their vocabulary knowledge and seeks to correlate learners’ vocabulary size with their study habits and use of strategies.

Amirian and Heshmatifar (2013) conducted a study that investigated vocabulary learning strategies used by English as a foreign language (EFL) university students at Hakim Sabzevari University in Iran. A questionnaire and semi-structured interviews were used to collect data from 74 EFL students. The major finding from this study was that guessing from context and
dictionary use were the most popular vocabulary learning strategies utilized by these students. This study recommends that students be trained in vocabulary learning strategies because equipping learners with vocabulary learning strategies will hold them responsible for their own learning and lead to developing autonomy. Students who are aware of different types of strategies and use them are effective language learners.

Kojic-Sabo and Lightbown (1999) conducted a study to investigate students’ approaches to vocabulary learning. The participants in the study were 47 ESL and 43 EFL students. A Yes/No test and a cloze test as well as a survey questionnaire were used to measure their knowledge of vocabulary and their strategy usage. Sabo and Lightbown stated, “Research shows that successful students not only used more strategies on average but also employed a wider variety of procedures and used them more consistently than their less successful peers” (p. 177). The major finding was that “there is a strong relationship between strategy use and learning outcomes, and that cluster analysis is an adequate tool for revealing such a relationship” (Sabo & Lightbown, 1999, p. 189). Similar to other studies on strategy use, dictionary usage was the most used and preferred strategy for ESL and EFL learners.

Motivation in Second Language Learning

As mentioned in the section of language learning strategies, motivation is considered one of the important factors that impacts learning second language (Gardner, Lalonde, & Moorcroft, 1985). Researchers Williams and Burden (1997) created a framework of motivation in second language (L2) learning using the social constructivist theory of motivation. This theory provides a framework conceptualizing motivation as socially negotiated by learners in the classroom. The
framework developed by Williams and Burden has a summary of motivational factors in the classroom setting. The motivational factors are classified into two basic categories: learner-internal and external factors.

According to the Williams and Burden (1997) framework, Learner-Internal factors can be thought of in terms of whether the desire to learn a second language come from outside or inside of the individual. Internal factors are the interest towards the activity, perceived value of the activity, sense of agency, mastery, self-concept, and attitudes. In order to determine if a second language learner is internally motivated, these are some questions to consider. Is the individual curious about the second language? Does the individual value the activities and tasks associated with learning the second language? Does the individual value the outcome of learning a second language? Can the individual set appropriate goals for their learning? Does the individual believe learning a second language is something they are capable of doing and being competent at it? Does he or she have an awareness of the skills needed to be good at mastering a second language? Is the individual aware of their strengths and weaknesses in the skills needed to be proficient in the English language? How do they define and view success and failure in learning a second language? What are their attitudes towards the target language community and culture? What are their attitudes towards the target language and towards language learning?

External factors include parents, teachers, peers, interactions with others who provide feedback, praise and punishment, the learning environment, education system, cultural norms, societal expectations and attitudes. In the social constructivist theory of motivation, learners are seen as active and involved in the process of learning by interacting with people and learning
environment. Social interaction is considered key for knowledge to be constructed. Understanding and valuing the cultural background of the learners as well as understanding and learning the cultural background of the target language play a very important role in learning a second language.

**Measurement of Vocabulary Size**

Measuring vocabulary size is important for several reasons. Firstly, English language teachers need to know the vocabulary size of native English speakers. They can use this information to set vocabulary learning goals for their second language learners (Nation, 2001). In addition, people are just curious and they want to know how their vocabulary size compares to that of others. Pignot-Shahov (2012) summarized the benefits of a vocabulary size test:

Valuable insights have been gained from recognition/receptive tests. First of all, it is possible to estimate learners’ vocabulary size. Secondly, it is possible to predict the amount of vocabulary learned across a course of instruction and also to compare the number of words learned at the same level but in different countries. (p. 42)

It is very important to know that “there is no standard testing method for calculating vocabulary size and the absence of this goes a long way to explain the enormous variation in the vocabulary size estimates and rates of progress among English speaking monolinguals which are reported” (Milton & Treffers-Daller, 2013, p. 153). However, there are two approaches to measuring learners’ vocabulary size. One way is to sample from the dictionary and test the learners on it. Nation stated that in the past, “this method was the most preferred way of measuring native speakers’ vocabulary size” (Nation, 2001, p. 522). A second method that is
used today is sampling from corpus studies. In corpus studies, “sampling involves arranging the vocabulary into frequency-based groups—the most frequent 1,000 words, the second 1,000 most frequent words, and so on—and sampling from each frequency band” (Nation, 2001, p. 523). These samplings then can be used to create a vocabulary size test for second language learners. The main purpose of this test is to investigate learners’ vocabulary size and to set learning goals. The size test provides a rough estimation of total number of known words. These estimates can be used when measuring long-term vocabulary growth and when comparing individuals or groups of second language learners. Vocabulary size tests are practical for separating students with a wide range of proficiencies.

How the Yes/No Test Was Developed and Used

The yes/no test, or Vocabulary Size Test, is used to measure students’ receptive vocabulary knowledge (Meara, 1992). It was created by Meara and his colleagues as a placement tool to categorize language learners into different Levels. Meara (1992) published the yes/no test in his book and he encourages others to use his tests for research and as a placement tool. It started as a self-reported vocabulary checklist to measure learners’ vocabulary size. However, this method of measuring vocabulary knowledge was not useful and did not provide a reliable and valid measurement of vocabulary knowledge. To improve the accuracy of the scores, Anderson and Freebody (1983) added false words to the vocabulary checklist. They did this to control for the fact that certain learners might overestimate their vocabulary knowledge. The basic premise of the test is that if a learner cannot recognize a word, it is unlikely that he or she can do anything else with the word. As a result, the yes/no test is considered a reliable and valid
measurement. Each yes/no test has 60 items: 40 real words and 20 false words. Meara (1992) prescribed that participants take three versions of the yes/no test, each version containing 60 items. Each learner’s average score is calculated to get a rough estimation of his or her total vocabulary size. Meara (1992) stated:

Learners who score less than 75% on this are not really functional in English, but they should be able to cope with some limited and predictable situations. This means that a learner who knows the basic 2,000 vocabulary words should be able to recognize 80% of the words in any text he comes across. Learners whose vocabularies don’t include these basic 2,000 word families are not going to be fluent readers, and will generally have difficulty coping with situations which are any way out of the ordinary. (p. 4)

It does appear that people with large vocabulary size do better at listening to and comprehending English than people whose vocabulary size is small (Meara, 1992).

The Benefits and Limitations of the Yes/No Test

The yes/no test is a simple and straightforward test to create, administer and score. The authors Lam (2010) and Beeckmans et al. (2001) discussed some of the advantages and disadvantages of the yes/no vocabulary test as a measurement tool for receptive vocabulary knowledge:

**Benefits.**

- The yes/no test has been shown to correlate well with other language proficiency tests.
● The yes/no test allows for a quick initial sorting of students into different Levels and reduces the need for individual placement by instructors …

● The yes/no test is a feasible alternative to other more established measures of language proficiency, especially in light of its practical advantages over these test formats (Lam, 2010, pp. 54-59).

Limitations.

● It is possible for students to recognize a word without really knowing what it means or how to use it.

● There are no clear guidelines for the construction of pseudo words (Beeckmans et al., 2001, pp. 239-40).

● Yes/no tests deal only with passive word recognition rather than active vocabulary (Beeckmans et al., 2001, pp. 239-240).

Clearly, there are benefits and limitations to the yes/no test. The major benefit of this test is that it correlates with other proficiency tests. This is important because it demonstrates the reliability of the yes/no test. Furthermore, it is inexpensive and simple to create and administer.
Chapter III: Methodology

Participants

The participants in this study were ESL students who were enrolled in IEP English courses to develop their English skills and prepare for university Level classes. The majority of the participants were learning English to seek higher education degrees. They were from various countries (Saudi Arabia, China, Korea, Burkina Faso, Bahrain, Laos, Cameroon, Burundi, and Turkey). In the beginning of the IEP, Michigan English Test was given to all participants and they were placed in one of six English proficiency Levels according to the results of the test. The Levels were from beginning Level (Pre-Level 1) to advanced Level 4 (Level 5 was not assessed in this study). Students were receiving between 21 and 23 hours of English language instruction a week. Beginning Level students were able to read and write some basic English. In this study, there were 111 participants.

Materials

Two instruments were used for gathering data in this study: a yes/no test (pre-test and post-test) and an online vocabulary learning strategies survey.

Size test (yes/no test). The yes/no test was created manually following the format of Meara (1992) (see Appendix A). All the words in the tests were selected randomly from the high frequency word bands and Academic Word List (AWL), Sub-Lists 1-5 and 6-10. Also, pseudo words were borrowed from Meara’s samples of the yes/no test. Anderson and Freebody (1982) were the researchers who came up with idea of adding false words to the yes/no test to adjust the test scores. Each test has 60 items: 40 real words and 20 pseudo words. Meara (1992), creator of
the yes/no test, recommended each student take at minimum three versions of each frequency band to get an accurate estimate of their vocabulary size.

**Survey.** The first part of the survey collected data on demographic variables which were intended to understand how factors such as country of residence, educational background, and length of English study in their home country affect vocabulary size. The survey (Appendix C) has 51 questions in five sections: background information, vocabulary learning strategies, use and practice of English, metacognitive strategies for planning and monitoring learning, and motivation (intrinsic and extrinsic). The questions in Sections 2, 3, 4, and 5 were borrowed from the questionnaire developed by Yang (1999). For Sections 2-5, the survey used a five-point scale from never (zero) to always (five) to rate participants.

**Procedure**

To answer the question of how learners’ vocabulary size changes over time, participants took a pre-and post-test of the yes/no test. The pre-test and post-tests were administered in the beginning of the semester and towards the end of that semester respectively.

**Size test (pre- and post-).** Using the high frequency word list and Academic Word List, samples of target words were selected for the test items. Three versions of the test were made because a large sample is required to make a reliable estimate of the participants’ vocabulary size. Meara (1992) and his colleagues, developers of the yes/no test format for second language learners, made the test available for placement use as well as general measurement of vocabulary size. False words borrowed from Meara’s (1992) book were used to attempt to invalidate test
takers’ judgments. The false words followed the phonetic rules of English, and they were created by changing one or two letters of real words.

Pre-Level 1 and Level 2 learners took six tests while Levels three and four learners took five tests. They took three versions of the first 1,000 (1K), and three versions of the second 1,000 (2K). Also, Levels 3 and 4 learners took two versions, A and B, of the Academic Word List (AWL). The tests were administered as a group in each Level. Students took the tests manually using paper and pen. Participants were asked to indicate whether or not they know the words by checking the box next to the word. They were told “knowing” a word means being able to think of at least one meaning. In addition, they were cautioned not to guess because wrong guesses would lower total score. The tests were timed and took no more than five minutes per test page. An entire test took 20-30 minutes per class. The researcher collected participants’ student ID numbers to help identify results. The study was conducted in a classroom setting; the class instructors administered the vocabulary size test and the survey. Refer to Table 2 for information regarding yes/no test, AWL, and Survey.
### Table 2

**Tests and Survey Taken by Participants in Each Level**

<table>
<thead>
<tr>
<th>Levels</th>
<th>Number of Participants in Each Level</th>
<th>Tests Given and Survey Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Level</td>
<td>15</td>
<td>1,000 (1K) (A,B,C)* 2,000 (2K) (A,B,C) Survey (Arabic and English)</td>
</tr>
<tr>
<td>Level 1</td>
<td>6</td>
<td>1,000 (1K) (A,B,C) 2,000 (2K) (A,B,C) Survey (Arabic and English)</td>
</tr>
<tr>
<td>Level 2</td>
<td>20</td>
<td>1,000 (1K) (A,B,C) 2,000 (2K) (A,B,C) Survey (Arabic and English)</td>
</tr>
<tr>
<td>Level 3</td>
<td>40</td>
<td>2,000 (2K) (A,B,C) AWL (A, B) Survey (English)</td>
</tr>
<tr>
<td>Level 4</td>
<td>40</td>
<td>3,000 (3K) (A,B,C) AWL (A, B) Survey (English)</td>
</tr>
</tbody>
</table>

*Meara (1992) suggested that students take three versions of the same test and the results be averaged.

**Survey.** The survey was administered during the participants’ vocabulary class towards the end of fall semester and spring semester. The vocabulary teacher who administered the survey was given written instructions which were repeated orally to the participants. Before they filled out the questionnaire, the teacher also explained the purpose and importance of the research and why it was crucial for students to give their honest opinions about their approach and strategies to vocabulary. Using their smart phones, participants took about 25 minutes to
complete the online survey. For Pre-Level through Level two, the survey was translated into their native language Arabic. Survey questionnaires in both Arabic and English were administered through Qualtrics survey software in fall 2015 and spring 2016. In fall 2015, 54 participants took the survey: 41 participants took the survey in English and 13 participants took the survey in Arabic. In spring 2016, 57 participants took the survey: 38 participants took the survey in English and 19 participants took the survey in Arabic. A total of 111 participants took the survey.
Chapter IV: Data Analysis and Results

Two sets of data, quantitative and qualitative, were analyzed for this study. The first set of data was the yes/no test that was administered as pre-test and post-test for two semesters. The pre-test and the post-test of the yes/no test were used to estimate the vocabulary size of the international students in various levels of English proficiency and measure receptive vocabulary size growth over a period of two semesters.

Quantitative Analysis: Vocabulary Size Test

Descriptive statistics. Figures 1 and 2 show pre-test and post-test average scores for all proficiency Levels. Pre-Level, Level 1, and Level 2 took the first 1,000 and the second 1,000 high-frequency words. Level 3 took the second 1,000 and AWL tests. Level 4 took the third 1,000 and AWL tests. According to Meara (1992), learners must score 75% or higher in the yes/no test to be considered proficient in the high-frequency word bands.
Figure 1. Learners’ Pre-test Vocabulary Size
Comparison of Results between Levels

**First 1,000 (1K) Yes/No test.** One-way analysis of variance (ANOVA) was conducted to compare the average pre-test scores of the first 1,000 high frequency words (1K). The results showed a statistically significant difference between Pre-Level, Level 1, and Level 2 in their 1K pre-test average scores at the p< .05 for three conditions [ F( 2, 38)=11.85, P=.000]. Post Hoc comparison using the Bonferroni Test was run, and it indicated the average vocabulary size test score for Level 1 was greater (m=27.9, SD=22.6) than Pre-Level (m=14.2, SD=16.9). The

---

Figure 2. Learners’ Post-test Vocabulary Size
average vocabulary size test score for Level 2 was greater (m=49.4, SD=23.8) than Level 1 (m=27.9, SD=22.6). The results show that participants in Pre-Level, Level 1, and Level 2 have different vocabulary size. The participants’ receptive vocabulary size increases as they continue their learning of vocabulary in different Levels. The average test scores from the first 1,000 high frequency words shows a clear distinction between Pre-Level and Levels 1 and 2.

Table 3

One Way ANOVA Analysis of 1K Pre-test

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>10781.50</td>
<td>5390.75</td>
<td>11.85</td>
<td>.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>38</td>
<td>17288.09</td>
<td>454.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>28069.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Second 1,000 (2K) Yes/No test results between levels. Participants in Pre-Level, Levels 1, 2, and 3 took the second 1,000 (2K) high frequency test. One way analysis of variance (ANOVA) was conducted to compare their average pre-test scores. The results showed a statistically significant difference between the four Levels in their 2K pre-test average scores at the p<.05 for three conditions [ F (3, 77)=11.29 , P=.000]. Post Hoc comparison using the Bonferroni Test was run, and it indicated the average vocabulary size test score for Level 3 was greater (m=34.4, SD=21.5) than Pre-Level (m=2.2, SD=4.2), and the score for Level 2 was greater (m=23.10, SD=20.69) than Pre-Level (m=2.2, SD=4.2). The results show that
participants in Levels 2 and 3 have significantly larger vocabulary size than participants in Pre-Level. To confirm the reliability of the yes/no test, results from 2k appear to go along with the placement tool used by the IEP English Program to place students into different Levels.

Table 4

*One Way ANOVA Analysis of 2K Pre-test*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>12138.62</td>
<td>4046.21</td>
<td>11.30</td>
<td>.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>77</td>
<td>27576.43</td>
<td>358.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>39715.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AWL Yes/No test results between levels.** An independent sample T-test was conducted to compare AWL pre-test and post-test average between Level 3 and Level 4. There was a statistically significant difference between the Level 3 and Level 4 pre-tests (df [78], t=−4.151, p< .000). The average for Level 4 was greater (M=29.8, SD=21.4) than Level 3 (M=12.6, SD=14.9). The results indicate that participants in Level 4 have more academic words than participants in Level 3 at the beginning of the semester. There was a statistically significant difference between Level 3 and Level 4 post-test (df [78], t=−4.9, p< .000). The average for Level 4 was greater (M=34.8, SD=20.5) than Level 3 (M=15.0, SD=14.4). Again, participants in Level 4 gained more academic vocabulary knowledge at the end of the semester than participants in Level 3.
Table 5

*Independent Samples T-Test for AWL Pre- and Post-test*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Level 3</td>
<td>12.6</td>
<td>14.9</td>
</tr>
<tr>
<td>Level 4</td>
<td>29.8</td>
<td>21.4</td>
</tr>
</tbody>
</table>

**Change in Vocabulary Size (Pre-test and Post-test Differences)**

Four tests were used to analysis the change in the data: ANOVA, Paired Sample t-test, Independent t-test and correlation.

*Figure 3. Learners’ Pre-test and Post-test Vocabulary Size*
Pre-level. A paired samples t-test was conducted to compare improvement in the first 1,000 (1K) high-frequency words with the second 1,000 (2K) high-frequency words in Pre-Level. There was not a significant difference between 1K average score (M=18.9, SD=13.26) and 2K average score (M=9.4, SD=11.17) condition; t (10) =1.64, p=.131. These results suggest that there was not a significant improvement for Pre-Level participants in their 1K and 2K vocabulary knowledge.

Level 1. A paired samples t-test was conducted to compare improvement in the first 1,000 (1K) high-frequency words with the second 1,000 (2K) high-frequency words in Level 1. There was a significant difference between 1K average score (M=26.7, SD=25.84) and 2K (M=7.1, SD=18.44) condition; t (5) =3.08, p=.027. These results suggest that participants in Level 1 can be expected to improve in 1K more than 2K.

Level 2. A paired samples t-test was conducted to compare improvement in the first 1,000 (1K) high-frequency words with the second 1,000 (2K) high-frequency words in Level 2. There was a significant difference between 1K average score (M=-4.5, SD=21.92) and 2K (M=6.0, SD=13.91) condition; t (15) =-2.52, p=.023. The results suggest that Level 2 participants show more improvement in their 2K vocabulary knowledge than in their 1K.

Level 3. A paired samples t-test was conducted to compare improvement in the second 1,000 (2K) high-frequency words with the AWL in Level 3. There was not a significant difference between 2K average score (M=-1.4, SD=25.74) and AWL (M=4.0, SD=9.54) condition; t (28) =-.58, p=.569. These results suggest that there was no improvement for Level 3 students in their 2K and AWL vocabulary size.
**Level 4.** A paired samples t-test was conducted to compare improvement in the third 1,000 (3K) high-frequency words with the AWL in Level 4. There was not a significant difference between 3K average score (M=-8.2, SD=19.59) and AWL (M=4.45, SD=18.69) condition; t (35) =1.81, p=.080. These results suggest that there was no improvement for Level 4 students in their 3K and AWL vocabulary size.

**Pre-Level, Level 1 and 2: Comparison of improvement.** Participants in Pre-Level, Level 1, and Level 2 took the first 1,000 (1K) and second 1,000 (2K) high frequency test. One way analysis of ANOVA was conducted to compare improvement scores. The results showed a statistically significant difference between the three Levels in their 1K average improvement score at the p< .05 for three conditions [F 2, 30 ]=7.17 , P=.003. The result shows that participants have significantly improved more in their 1K vocabulary knowledge than their 2K vocabulary knowledge. 1K Pre-Level participants improved more than 2K Level 2 participants. The improvement between Pre-Level, Level 1, and Level 2 in their 2K is not significant. To the naked eye, it seems that students in Level 2 post-test score went down compared to their pre-test score. Their average scores are similar in 2K vocabulary knowledge.

**Level 3 and 4 AWL: Comparison of improvement.** An independent-samples t-test was conducted to compare improvement in AWL between Level 3 and Level 4. There was not a significant difference in Level 3 (M=4.03, SD=9.54) and Level 4 (M=4.46, SD=18.69) condition; t (63) = -.113, p=.910. Their average scores are similar in AWL vocabulary knowledge, meaning participants in Level 3 and Level 4 improved at the same rate of growth of AWL vocabulary size.
**Pre-test and Post-test Results. Third 1,000 (3K) Yes/no.** Participants in Level 4 took the pre-and post-test of the third 1,000 high frequency words. A paired samples T-test was conducted to compare 3K pre-test and post-test scores. There was a significant difference in the scores of the pre-test (M=30.8, SD=26.45) and post-test (M=40.1, SD=26.69) conditions; t(39)=-2.700, p=.010. These results suggest that the participants in Level 4 made significant improvement in their receptive vocabulary size at the end of the semester.

Table 6

**Summary of Paired Samples T-Test for 3K Pre- and Post-test**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre-Test Mean (SD)</th>
<th>Post-Test Mean (SD)</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3K Average Scores</td>
<td>30.8 (26.5)</td>
<td>40.1 (25.7)</td>
<td>-2.700</td>
<td>39</td>
<td>.010</td>
<td>3.45</td>
</tr>
</tbody>
</table>

*p<.05

**Yes/No Test Correlation with Survey**

**Vocabulary size correlation with survey.** A Pearson correlation coefficient was computed to assess the relationship between 1K, 2K, and Survey Sections 2-5 in Pre-Level, Level 1, and Level 2. There was a positive correlation between improvement in 1K and 2K (r=.478, p<.005). This means that if participants show improvement in 1K, they also show improvement in 2K. Also, there was a negative relationship between improvement in 1K and survey section two and three (r= -.401, p<.021, r= -.378, p<.030). Survey Section 2 is about how one uses and practices English daily. Survey Section 3 is about monitoring one’s own learning of English. If there is a negative correlation that means the relationship is inverse. Furthermore,
there was a negative relationship between 2K and Survey Section 3 (r=-.353, p<.044). This relationship was also inverse.

A Pearson correlation coefficient was computed to assess the relationship between 2K, AWL, and Survey Sections 2-5 in Level 3. There was no significant correlation between improvement in 2K, AWL, and Survey Sections 2-5 and overall score. Overall survey global score correlated with improvement in 2K (r=.426, p<.021).

A Pearson correlation coefficient was computed to assess the relationship between 3K, AWL, and Survey Sections 2-5 in Level 4. There was a strong correlation between improvement in 3K and AWL (r=.789, p<.000). Also, there was negative correlation between improvement in 3K and answers in Survey Section 2 (r=-.377, p<.023). There was no significant correlation between improvement in 3K, AWL, and Survey Sections 2-5 and overall score.

**Analysis of Survey**

The second source of data was a survey questionnaire that was administered once for two semesters. The survey questionnaire has background information and five sections that inquire about vocabulary learning strategies, use and practice of English, monitoring learning, goals and motivation for learning English as a second language. The survey questionnaire consisted of open-ended questions, short answers, and a scale of zero to five for Sections 1-5. The survey questionnaire was used to figure out the factors associated with vocabulary growth.

**Survey section 1: vocabulary learning strategies.** In this section, participants were asked, “what do you do to learn new words? Describe anything and everything that you do to learn new words.” Participants from all levels answered questions from Section 1. Their answers
were categorized in order to learn what vocabulary strategies they were using to learn new words: 23% of the participants used reading materials to learn new vocabulary while 22% of the participants used dictionary to look up and get information about new vocabulary. Another 22% of the participants said using words in context is how they learn new vocabulary. About six percent of the participants said they used interaction with others, form and meaning, and flashcards to learn new words. Participants were also asked what they did to review vocabulary words. They basically said they learned new words and reviewed old words using the same types of strategies mentioned above.
Chapter V: Discussion

Research Question 1

How does the size of learners’ high-frequency receptive vocabulary size change over two semesters? This study attempted to describe ESL students’ receptive vocabulary size in the Intensive English Program. The study’s purposes were to measure learners’ vocabulary size, and examine the relationship between learners’ vocabulary size and their vocabulary learning strategies. My first research question asks about change in learners’ high-frequency receptive vocabulary size over the period of two semesters. In order to investigate the change, the results of yes/no test and surveys were compared to see if (a) the groups were different, (b) there was improvement, and (c) there was correlation between strategy use and improvement.

To get a snapshot of the participants’ receptive vocabulary size, pre-test and post-test for various levels were compared for improvement. For the first 1,000 high-frequency band, the results showed a statistically significant difference between Pre-Level, Level 1, and Level 2 in their 1K pre-test average scores. The average vocabulary size test score for Level 2 was greater than Level 1. The participants’ receptive vocabulary size increases as they continue their learning of vocabulary in different Levels. The average test scores from first 1,000 high-frequency words show a clear distinction between Pre-Level and Levels 1 and 2. For the 2K high-frequency words, the results showed a statistically significant difference between the four levels in their 2K pre-test average scores. The results show that participants in Level 3 have significantly larger vocabulary size than participants in pre-level. An important piece of information from the 1K and 2K pre-test test scores is that the IEP English program’s placement tests are reliable in terms
of placing participants in their relative levels. I would like to point out an interesting observation about Level 1 students in comparison to Level 2 students. Regarding the first 1,000 high-frequency band, Level 1 is more like Level 2. However, regarding the second 1,000 words, Level 1 is more like pre-level because there are no significant difference between pre-test and post-test. This is an interesting observation for two important reasons: (a) the Yes/No size test is a sensitive tool that can describe the profile of learners’ vocabulary size across frequency bands (as shown “within” Level 1 data), and (b) Just the simple Yes/No test can more or less accurately differentiate the proficiency groups that were determined based on more labor-intensive and time-consuming placement tests. Also, Level 2 students’ post-test scores decreased compared to their pre-test. This could happen due to many factors such as students randomly choosing answers carelessly. Due to time restrictions, some of the post-tests were administered by the vocabulary class teachers who might have not explicitly explained the purpose and importance of choosing the best answers for the yes/no tests and how that affect their vocabulary size scores negatively. The yes/no test is reliable at these lower levels.

To answer the question of how does the size of learners’ high-frequency receptive vocabulary knowledge change over two semesters, the results from the pre-test and post-test for the first 1,000, the second 1,000, and AWL, suggested that some participants show significant improvement in their vocabulary size. In other words, most learners’ average vocabulary size did increase over the period of two semesters. For example, Level 4 participants who took the pre-test and post-test of the third 1,000 high-frequency band made significant improvement in their receptive vocabulary size.
One of the goals of the study was to find out Levels 3 and 4 vocabulary size from the Academic Word List (AWL). These two levels need to have knowledge of AWL because they are intermediate and advanced levels of the IEP. After exiting Level 4, learners take college ESL courses which are advanced English classes. For both pre-test and post-test, the results indicated that participants in Level 4 had more AWL than participants in Level 3 at the beginning and end of the semester. Another independent-sample t-test was conducted to compare improvement in AWL between Level 3 and Level 4. When comparing improvement in AWL between Level 3 and Level 4, the results show that there was not a significant difference between Level 3 and Level 4. Participants in Levels 3 and 4 improved at the same rate of growth of AWL vocabulary size, though Level 4 did have a larger AWL size.

Research Question 2

*What factors are associated with individual differences in vocabulary change?* The survey questionnaire was used to figure out the factors associated with vocabulary growth. Using the yes/no test and the survey questionnaire, correlational analysis was used to investigate the relationship between vocabulary size and other factors such as use and practice of English, monitoring learning, goals, and motivations for learning English as a second language. There was a negative correlation between improvement in the first 1,000 high-frequency band and survey sections two and three. Also, there was a negative correlation between improvement in the second 1,000 high-frequency band and Survey Sections 2 and 3. In these two sections, I asked about learners’ use of general language learning strategies as well as vocabulary strategies. To summarize the findings, the more survey questions answered positively from Sections 2 and
3, the worse participants performed in their vocabulary size test. This could be due to many factors such as students answering the questions just to please teachers. Furthermore, overall global survey scores positively correlated with improvement in the second 1,000 high-frequency band. These were the only statistically significant correlations between the yes/no test improvement and the survey responses.

According to Oxford (1994), “research has repeatedly shown that conscious, tailored use of such strategies is related to language achievement and proficiency” (p.1). Furthermore, Rubin (1975) identified a successful language learner as someone who consistently uses language learning strategies. Learners who have strategies for figuring out what they need to do are able to plan, control, and evaluate their learning. Sanaoui (1995) also discussed taking a systematic approach to vocabulary learning. She listed several mnemonic strategies successful vocabulary learners use; two of them are writing down the vocabulary and discussing the vocabulary with someone to remember it. However, in my study, vocabulary improvement of the participants who answered positively to language learning strategies as well as vocabulary learning strategies correlated negatively with their responses. The participants were only surveyed regarding their strategy use, but not closely monitored. Sometimes, people self-report in a way that exaggerates their daily habits. Further research is needed to learn about participants’ actual strategy use.

Section 1 Question 14 asks about a way or system of organizing vocabulary learning and participants were asked to answer yes or no and to explain what their system is: 37% answered yes and 34% answered no. The other 29% did not provide an answer. More than half of the participants in this study either did not have a way of learning vocabulary or did not provide an
answer to that question. This is the first step of identifying the needs of the current learners. Further research is needed to understand how participants are using vocabulary learning strategies, and if they are indeed ineffective. According to Oxford (1994), “considerable research has been conducted on how to improve L2 students’ learning strategies” (p. 3). The issue is not lack of research on how to improve learners’ strategy use, but lack of implementing the findings to meet the needs of the learners. This study did not address whether participants are using strategies effectively and systematically.

**The Importance of Measuring Learners’ Vocabulary Size**

Meara (1992) created a reliable vocabulary size test called yes/no test that determines the number of high-frequency words known by learners. Since there is no standardized vocabulary size test, the yes/no is one of the best options available. The yes/no test is simple and only tests learners’ ability to recognize basic English words. It does not measure how well a learner knows a word. Yes/no test was used to provide an estimation of the vocabulary size of the learners over the period of two semesters. According to Meara (1992):

Learners who score less than 75% on this test (the first 2,000 high-frequency words) are not really functional in English, but they should be able to cope with some limited and predictable situations. A learner who knows the basic 2,000 words vocabulary should be able to recognize 80% of the words in any text he/she comes across. Learners whose vocabularies do not include these basic 2,000 words are not going to be fluent readers and will generally have difficulty coping with situations. (p. 4)
According to my knowledge, this study is the first to attempt to determine ESL students’ receptive vocabulary size in Intensive English Programs. The main purpose of measuring learners’ receptive vocabulary size was to provide rough estimations of total known words for various proficiency levels and to use that to set vocabulary learning goals. Furthermore, these estimations were used to measure change of vocabulary size as well as to compare different levels’ vocabulary knowledge and improvement. The major research findings can be used for curricular planning and instructional decisions to better meet the needs of IEP learners.

**How the Yes/No Test can be used as a Placement Tool in IEP**

Lam (2010) investigated the use of the yes/no test as a placement tool in a Spanish foreign language program at the University of Alberta, Canada. When newcomers entered the language program, they needed to be tested to be placed in their appropriate level. The placement test was complicated and it required resources such as time and effort. Some language programs allowed their students to assess themselves and place themselves in their correct level (Lam, 2010). This method of assessment has many problems such as learners placing themselves in a higher Level than they should be. On the other hand, other language programs might use commercialized tests. One of the major disadvantages of using commercialized tests is that they do not follow the language program’s objectives. In addition, these tests are expensive and the language program or the students must pay for them (Lam, 2010). Ultimately, when placing students into different levels, the important question is which placement test roughly estimates students’ vocabulary size and also is simple to design, administer, and score. The yes/no test fulfills these requirements and therefore, can be used as a placement tool (Lam, 2010).
In Lam’s (2010) study, the students took the yes/no test in the fall and in the winter semesters using computers and randomly selected words. Lam’s study explored the question, “whether a yes/no test can distinguish between adjacent placement levels” (p. 65). Her results showed that the yes/no test is only able to distinguish between low level proficiency to intermediate Level proficiency. The yes/no test is not perfect, but it makes the placement process easier by identifying beginning level students and intermediate level students (Lam, 2010). Similarly, my study also clearly distinguishes between low and intermediate levels in their vocabulary size. I would recommend the yes/no test to be used as a placement tool in IEPs because it is simple to create, administer, and it is able to sort students into different levels. It can save time and money for learners, instructors, and coordinators.

**Practical Implications**

Vocabulary learning is an important part of mastering another language. However, teachers and learners are uncertain the best way to conquer this challenge because it depends on so many factors. One starting place is using frequency-based wordlists. This is one of the resources available to help second language learners to acquire vocabulary knowledge. According to Waring and Nation (1997), frequency-based wordlists “provide a rational basis for making sure that learners get the best return for their vocabulary learning efforts” (p. 17). The first 2,000 high-frequency word families, made of common English words, provide 80% of the words in any text (Nation, 2001). The first 2,000 high-frequency words are the bare minimum for second language learners in IEP. Ideally, they would also learn the third 1,000 and AWL to prepare for college.
In my study, I used words from the first 3,000 high-frequency list and words from the AWL list to create the yes/no test to find out an estimate of learners’ total vocabulary size. Waring and Nation (1997) believe that, “the learner needs to know the 3,000 or so high-frequency words of the language. These are immediate high priority and there is little sense in focusing on other vocabulary until these are well learned” (p. 3). This provides a strong foundation to continue to build upon. The good news is that prioritizing and teaching the first 2,000 to 3,000 high-frequency words is a great starting place. However, it is not sufficient to understanding academic text. The next best strategy for second language learners who are planning to study in university-level courses is to learn the vocabulary from the list of the Academic Word List (AWL). Waring and Nation (1997) made two recommendations to English language teachers: the first recommendation is to prioritize high-frequency words, and the second recommendation is to use class time to help learners develop vocabulary learning strategies such as guessing from context, using mnemonic and word parts, and using flashcards. The goal is for English language learners to continue increasing their vocabulary knowledge independently by using effective vocabulary learning strategies.

**Limitations of the Study**

Firstly, there were some unreliable tests scores which were excluded from the results. Unreliable tests were those tests in which students marked all the items. Secondly, some students average test scores were based on two tests instead of three. Meara (1992), creator of the yes/no test, recommends each student take minimum three versions of each frequency band to get accurate estimate of their vocabulary size. Therefore, these two sets of limitations impact
the results of the yes/no test. In general, the yes/no test is not 100% accurate. Yes/no test only tests the participants’ ability to recognize basic English words. It does not measure how well a student knows a word. It does provide rough estimate of receptive vocabulary size. Tests that are available to measure vocabulary size are imperfect but they are still better than not having any vocabulary tests.

**Suggestions for Future Research**

Future studies are needed on finding more about what strategies international students use consistently or systematically. The study needs to be more detailed than a self-reported survey of vocabulary learning strategy.
Chapter VI: Conclusion

In this study, the yes/no vocabulary test was used to measure basic knowledge of 3,000 Level high-frequency words and the Academic Word List. In addition to the yes/no test, learners were surveyed to determine if there was a correlation between their vocabulary size and the specific vocabulary learning strategies, their daily use and practice of English, self-monitoring learning, goals, and motivation. The results suggest that pre-test and post-test for 1K and 2K, participants showed some improvement in increasing their receptive vocabulary size. Also, participants who took 3K and AWL pre-test and post-test show significant improvement in their vocabulary size. The results also indicate that the yes-no test is a useful tool for placing students by Level. This test could be used alone or in conjunction with other placement tests. There were significant differences in vocabulary size between the Levels. In addition, there is no significant relationship between improvement and survey strategy responses. The major finding from this study was the importance of prioritizing high-frequency words and strategy training for Intensive English Programs.
References


Rubin, J. (1975). What the ‘good language learner’ can teach us. *TESOL Quarterly, 1*, 41


Appendix A: Yes/No Test

<table>
<thead>
<tr>
<th>Tech ID</th>
<th>5 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1K A</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>16</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>22</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>23</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>24</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>25</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>26</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>27</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>28</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>29</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>30</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>31</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>32</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>33</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>34</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>35</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>36</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>42</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>43</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>44</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>45</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>46</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>47</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>48</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>49</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>50</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>51</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>52</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>53</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>54</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>55</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>56</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>17</td>
<td>health</td>
<td>37</td>
<td>such</td>
<td>57</td>
</tr>
<tr>
<td>18</td>
<td>very</td>
<td>38</td>
<td>troake</td>
<td>58</td>
</tr>
<tr>
<td>19</td>
<td>gummer</td>
<td>39</td>
<td>stick</td>
<td>59</td>
</tr>
<tr>
<td>20</td>
<td>cantileen</td>
<td>40</td>
<td>shout</td>
<td>60</td>
</tr>
</tbody>
</table>
Appendix B: Survey Questionnaire

Vocabulary Questionnaire Fall 2015

Background Information

Q1 Name: ____________________________________________________________

Q2 Tech ID: __________________________________________________________

Q3 Gender:
  ○ Male  (1)
  ○ Female  (2)

Q4 Check your current Level in the IEC:
  ○ Pre-Level  (1)
  ○ Level 1  (2)
  ○ Level 2  (3)
  ○ Level 3  (4)
  ○ Level 4  (5)
  ○ Level 5  (6)
Q5 Check all Levels you studied at SCSU IEC:

☐ Pre-Level (1)
☐ Level 1 (2)
☐ Level 2 (3)
☐ Level 3 (4)
☐ Level 4 (5)
☐ Level 5 (6)

Q6 What is your first language?
_________________________________________________________________ 

Q7 What other languages do you speak?
_________________________________________________________________

Q8 How long have you been in the U.S. (____ years ____ months)?
_________________________________________________________________

Q9 How long have you studied English (____ years _____ months)?
_________________________________________________________________

Q10 Before IEC at SCSU, have you studied English at another school in the U.S.? 
☐ Yes (how many years/months) (1)
_________________________________________________________________

☐ No (2)
Section 1
This section is about how you learn vocabulary.

Q11 During the last week (seven days period), how much time did you spend studying vocabulary? (total # of hours)

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q12 To learn new words, what do you do? Describe anything and everything that you do to learn new words.

________________________________________________________________
________________________________________________________________

Q13 To review old words, what do you do? Describe anything and everything that you do to review old words.

________________________________________________________________
________________________________________________________________

Q14 Do you have your own way or system of organizing your vocabulary learning?  

_________Yes  __________No

________________________________________________________________

Q15 If yes, describe your system of vocabulary learning.

________________________________________________________________
________________________________________________________________
Q13 To review

Q16 Explain why you use this system
Q17-31 Section 2
This section is about how you use and practice English. Read the statements below carefully and choose one answer from scale 0-5. 0 is never and 5 is always.

<table>
<thead>
<tr>
<th></th>
<th>0 (1)</th>
<th>1 (2)</th>
<th>2 (3)</th>
<th>3 (4)</th>
<th>4 (5)</th>
<th>5 (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. I take adequate notes of lectures.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>18. I read for fun in English.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>19. I start conversations in English.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>20. I interact with native speakers of English.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>21. I become friends with Americans.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>22. When I listen, I ask someone to speak more slowly.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>23. I watch TV shows or movies in English.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>24. I learn about the culture of English speakers.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>25. I use the English words I know in different ways.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>26. I speak English even</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Question</td>
<td>Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>when I am afraid of making a mistake.</td>
<td>(10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I enjoy reading newspapers, magazines and books.</td>
<td>(11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I look for opportunities to read as much as possible in English.</td>
<td>(12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I make vocabulary lists of new words that I learn.</td>
<td>(13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I spend a lot of time reviewing vocabulary.</td>
<td>(14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I participate in group discussions.</td>
<td>(15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Q32-35 Section 3

This section is about what you think about your own learning of English. Read the statements below carefully and choose one answer from scale 0 (never) - 5 (always).

<table>
<thead>
<tr>
<th></th>
<th>0 (1)</th>
<th>1 (2)</th>
<th>2 (3)</th>
<th>3 (4)</th>
<th>4 (5)</th>
<th>5 (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32. I notice my English mistakes and try not to make the same mistake next time.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>33. I plan my schedule so I will have enough time to study English.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>34. I try to find out a better way to learn English.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>35. I pay attention to the feedback I receive from my teachers.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>0 (1)</td>
<td>1 (2)</td>
<td>2 (3)</td>
<td>3 (4)</td>
<td>4 (5)</td>
<td>5 (6)</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>32. I notice my English mistakes and try not to make the same mistake next time. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I plan my schedule so I will have enough time to study English. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. I try to find out a better way to learn English. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. I pay attention to the feedback I receive from my teachers. (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q36-
Section 4

This section is about what you think about your own learning of English. Read the statements below carefully and choose one answer from scale 0 (disagree) - 5 (agree).

<table>
<thead>
<tr>
<th></th>
<th>0 (1)</th>
<th>1 (2)</th>
<th>2 (3)</th>
<th>3 (4)</th>
<th>4 (5)</th>
<th>5 (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36. When I graduate from SCSU, I want to be good at English. (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>37. I want my English skills to help me find a good job. (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>38. I want English to be useful in my life. (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q40-51 Section 5
This section is about your motivations toward learning English. Read the statements below carefully and choose one answer from scale 0 (disagree) - 5 (agree).

<table>
<thead>
<tr>
<th></th>
<th>0 (1)</th>
<th>1 (2)</th>
<th>2 (3)</th>
<th>3 (4)</th>
<th>4 (5)</th>
<th>5 (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. If I fail to learn English, it will disappoint those closest to me. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Being able to speak English helps me become a more knowledgeable person. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. Learning English will increase my social status. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. I have a strong desire to know all aspects of English. (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. I have to study English for better job opportunities. (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Being able to speak English makes me feel good about myself. (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Being able to speak English gives me a feeling of success. (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Being able to speak English helps me communicate with foreigners.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. I love learning English.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. I can get rewards from others for learning English.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. I am proud of myself for learning English.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. People will respect me more if I know English.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: Default Question Block

Start of Block: Block 1

You have reached the end of the vocabulary questionnaire survey. Please verify that you have completed the entire survey before selecting the submit button. Once submitted, you will no longer be able to change your answers. Thank you for your participation.
Appendix C: Informed Consent

[Form]

Name: ____________________________
Tech ID: __________________________
Gender: Female ( ) Male ( )

Check your current level in the IEC:
- [ ] Pre-Level
- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4
- [ ] Level 5

St. Cloud State University
Institutional Review Board
Approval date: 3-9-15
Expiration date: 3-8-16

Check all levels you studied at SCSU IEC:
- [ ] Pre-Level
- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4
- [ ] Level 5

What languages do you speak?

Your first language: ____________________________
Other languages: ____________________________

How long have you been in the U.S.? ______ years ______ months

How long have you studied English? ______ years ______ months

Have you studied English at another school in the U.S. before IEC at SCSU?
Yes: ______ years ______ months  No: ______

INFORMED CONSENT

In this project, we want to know how many English words IEC students know. This information will be useful for our students and our program. Your participation will be very helpful for the IEC.

☐ This is NOT a test.
☐ Your name will NOT be used after the data have been recorded for analysis.
☐ Your participation is voluntary. You may stop any time if you want to.
☐ Even if you decide not to do this, it will NOT affect your relations with your instructor, the researcher, or the university.
☐ Your participation will NOT affect your grades.
☐ The result from the research may be presented or published. (Your name will NEVER be used.)
☐ The data will be used ONLY for academic research. If you are interested to know about the results, we can share that information with you when it becomes available.

If you give your permission to use the data for research, please sign below.

☐ Are you at least 18 years of age? Yes ______ No ______
If you answered NO, please stop. Thank you.

Name in Print: ____________________________
Date: ________________

For questions, please contact:
Deqi Yuan: yuande@stcloudstate.edu
Faculty Supervisor: ckima@stcloudstate.edu
Department of English
Appendix D: IRB Expedited Review Approval Signature Page

Institutional Review Board (IRB)

Name: Deqa Yusuf
Address: 520 15th Avenue SE
          Apt 208
          St. Cloud, MN 56304
          USA
Email: yude1401@stcloudstate.edu

Co-Investigators: Choonkyong Kim

Project Title: Vocabulary Size Test

Comments:
The Institutional Review Board has reviewed your application to conduct research involving human subjects. We are
pleased to inform you that your project has been APPROVED in full accordance with federal regulations. Please note the
following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of human subjects in this project. Any adverse
events must be reported to the IRB as soon as possible (e.g., research related injuries, harmful outcomes,
significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in
  advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

- Exempt reviews only require the submission of a Continuing Review/Final Report form in advance of the expiration
date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal
  is requested and approved, new consent forms will be officially stamped and reflect the new approval and
  expiration dates.

- The principal investigator must seek approval for any changes to the study (e.g., research design, consent process,
survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

Good luck on your research. If you require further assistance, please contact the Office of Research and Sponsored
Programs at 320-308-4932 or email lidonny@stcloudstate.edu. All correspondence should include your SCSU IRB
number as indicated on this letter.

For the Institutional Review Board:

Linda Donnay
IRB Administrator
Office of Research and Sponsored Programs

For St. Cloud State University:

Patricia Hughes
Interim Associate Provost for Research
Dean of Graduate Studies

SCSU IRB#: 1426 - 1744
Type of Review: Approval Date: 3/9/2015
Expiration Date: 3/8/2016