Vocabulary Size, Background Characteristics, and Reading Skill of Korean Intensive English Students

Nolan Weil
Utah State University, USA

Bio Data:
Nolan Weil is Assistant Professor of ESL at Utah State University (USU) where he teaches courses in academic reading, writing, and oral discourse, as well as various content-based topics courses. His current research interests include vocabulary learning and individual differences in language learning.

Abstract
This study examines the relationship between breadth of vocabulary, background experiences in learning English and student skill in the reading of an academic text. The author used the Swansea Levels Tests to estimate vocabulary sizes and collected information on background characteristics via questionnaire from eleven Korean students enrolled in an Intensive English program and five Korean undergraduate students at Utah State University. Eight of the Intensive English students were subsequently trained in a think-aloud procedure and then completed a research task in which they read a 960-word essay. The task required the students to think aloud as they attempted to work out the meaning of the text. Their performances were video-recorded and their verbal reports were transcribed, and these were subjected to quantitative and qualitative analyses. Students with more total hours of high school English instruction tended to score higher on the vocabulary measure, and students with more vocabulary tended to process the text more quickly and rely less on a dictionary. However, students with larger vocabularies did not always appear to be the more skillful readers. The author finds some evidence that the better readers demonstrated superior syntactic knowledge that enabled them to rely more on the text and less on compensatory strategies.

Key Words: Reading ability, vocabulary size, individual differences, and student background
Introduction
This study arose out of my desire as a teaching professor to understand the individual differences in reading abilities of students taking an academic reading course in a university-based Intensive English Program (IEP). While grounded in a familiarity with both first and second language reading research, the current study is not primarily focused on resolving any of the ambiguities, theoretical or methodological, reported anywhere in that literature. My more modest aim has been instead more personal—that is to closely examine, in order to better understand, a specific group of readers, with whom I have had extensive experience as a reading teacher. In so doing, I have sought to inquire whether there are any discernable connections between (a) the body of literature that I have thought of as theoretical grounding for my practice as a reading teacher and (b) students with whom I am familiar as individuals whose personal and academic development has been my primary professional commitment.

As this paper will suggest, second language readers (at least as exemplified by a group of Korean students in one IEP), even when they are presumed by virtue of placement procedures and promotion standards to be at roughly the same general level of reading development, often have widely divergent reading capabilities. While it is often difficult to pin these down within the context of the activities and routines of a reading classroom, this research demonstrates how the use a think-aloud technique can make a student’s reading processes somewhat more transparent, revealing much about the student’s strengths and weaknesses as a reader.

Background
The ability to read is a critical academic skill, and efforts to understand reading have yielded a prodigious literature. While it is beyond the scope of this paper to conduct an extensive review of this literature, it is not hard to find such reviews (e.g., Bernhardt, 2005; Grabe, 1991; 2004; Pang, 2008). By virtue of a cursory overview, however, it is probably fair to say that most reading researchers concerned with understanding the cognitive underpinnings of reading now agree that skillful reading is a complex process in which comprehension results from the integration of bottom up/data driven processes and top down/knowledge based processes although just how this works is not well understood (Carrell, 1988; Eskey & Grabe, 1988).

Increasingly detailed specifications of what the lower level and upper level processes might include have emerged over the last thirty years. Koda (2005) has
published an impressive synthesis of much of this work, noting that the earliest attempts to explain second language reading relied almost exclusively on work in first language reading. Typical of this work is that it often strove to propose some sort of abstract model that might explain competent reading. Other research strands have sought to contrast how competent readers differ from less competent readers. As Koda makes clear, these agendas were effectively advanced through the widespread adoption of a component skills approach following the work of Carr and Levy (1990). In her review, Koda advocates strongly for competency dissection via a component skills approach as particularly well suited for advancing our knowledge of second language reading, noting in particular the increasing attention that researchers have devoted to the influences of L1 reading processes on L2 reading development. At the risk of gross oversimplification, the large body of work that Koda (2005) has analyzed generally demonstrates that fluent reading is accomplished largely by virtue of automatic word recognition, a reasonably large vocabulary, automatic syntactic parsing, and knowledge of text structure and discourse organization. Moreover, a reader’s background knowledge is also a major factor in determining how well a reader will be able to comprehend a text.

In addition, we are coming to recognize the important role that cross-linguistic factors play in explaining second language reading ability (Koda, 2005). Indeed, research has consistently shown that while factors related to a reader’s second language knowledge (especially lexical and syntactic knowledge) account for about 30% of the variance in proficiency among second language readers, first language reading ability accounts for about 20%, a small yet not easily discounted proportion, leaving 50% of the variance unexplained (Berhardt, 2005). Based on these findings, Bernhardt has proposed a compensatory model of second language reading in which the unexplained variance is explained by reference to factors such as motivation, interest, content and domain knowledge, and ability to use comprehension strategies. The model suggests that L2 reading competence rests on the three sources just indicated: L1 literacy, L2 language knowledge, and other sources outside of L1 and L2 specific knowledge. These three sources operate interactively such that deficiencies in certain knowledge sources, for example, L2 vocabulary, may be compensated by other resources, such as background knowledge or strategic action.

That effective readers are not merely efficient processors of perceptual and linguistic information encoded in text is indicated by studies that have employed
think-aloud methods to observe readers’ strategic interactions with text. As Pressley and Afflerbach (1995) have shown in an analysis based on many of these studies, good readers typically engage in a great variety of strategic activities before, during, and after reading in order to facilitate optimal comprehension. According to Pressley and Afflerbach, strategic reading is particularly in evidence when the text is challenging and the reader has a vested interest in making meaning of the text (as for example when academic or professional goals may be at stake). Good readers, for example, approach a text with purpose, setting goals, sizing up a text, and deciding how to read it. They sometimes engage in traditionally recognized reading behaviors such as previewing, skimming, scanning, selective reading, and activating prior knowledge. During reading, they do such things as adjust reading speed according to text difficulty, reread, paraphrase ideas, make inferences, interrogate the writer’s purposes and assumptions, and critically evaluate arguments and conclusions. Good readers continually monitor their comprehension. They develop hypotheses about the meaning of the text, and they continually evaluate their understanding, noticing discrepancies between previously constructed meanings and developing meanings. Good readers evaluate the relevance of unknown words and phrases, taking measures to resolve their meanings when these seems crucial, but often skipping over them when doing so will not seriously impede understanding. These examples do not exhaust the range of activities that characterize strategic readers, as a perusal Pressley and Afflerbach’s extensive review of the matter suggests.

**Research context**
The current study was inspired in large part by my experience over several consecutive semesters as instructor of record for a level-three reading course within a four-level pre-university program at Utah State University. The course, entitled *Reading Authentic Texts*, is an intermediate level course that meets three times a week over a fifteen-week semester. It is designed to help learners of English develop the reading skills and strategies that they will build upon in level four, where the reading becomes increasingly academic in nature. Text types introduced at level three, while they include some textbook excerpts, consist primarily of texts written in a less academic style which are nevertheless likely to be encountered by entry-level college readers in general education courses (e.g., popular magazine articles, and book excerpts, newsletters, and web pages).
In designing the course, I attempted to take into account the probable implications of contemporary theory and research in reading as highlighted in the previous section: the importance of building background knowledge where it may be lacking, the role of vocabulary development and word knowledge, the facilitative effects of knowledge of text structure and discourse cues, the benefits of strategic knowledge, and so on. As befitting a reading class, a considerable proportion of class time was devoted to silent reading. In-class reading activities were, moreover, often coupled with various tasks designed to accomplish two purposes: 1) to focus readers’ attention on some particular aspect of text and/or reading process, and 2) to make the students’ interactions with the text more visible as a way of trying to assess student performance while gaining feedback to facilitate the pacing of instruction.

The impetus for the current study arose out of observations gathered while trying to implement this plan of instruction. Indeed, given what seemed to be a well-specified reading task, some students were extraordinarily slow, even apparently disengaged, prompting me to puzzle over the possible reasons. Was the task too challenging? Was student nonperformance merely a reluctance to make a mistake that the teacher might see as he went around glancing over shoulders? Was it simply a lack of motivation? Was it resistance due to a mismatch between the teacher’s instructional style and the students’ expectations of what ought to go on in a reading class?

During informal discussions, students frequently mentioned lack of vocabulary as the primary source of difficulty in dealing with course readings, and I began to be quite interested in the possibility of measuring the vocabulary size of students. I was also curious regarding their strategic capabilities, particularly the extent to which they were able to compensate for limited vocabulary knowledge, and finally, it seemed natural to inquire as to the extent of preparation students had had prior to their enrollment in USU’s Intensive English program.

Since a good deal of what we know about strategic aspects of reading has come through the use of think-aloud reports (e.g., see Pressley & Afflerbach, 1995), the current study was designed to employ a think-aloud methodology as the principal component. A think-aloud report involves having a human subject solve a problem (in the case of reading that problem might be comprehending a text) and to verbalize whatever thoughts come immediately to mind while working on a problem solution, i.e., working out an understanding of a text, in the case of reading. While think-aloud methods have shown themselves to be robust, they are not without problems
(Ericsson & Simon, 1993). One difficulty in using them with second language learners is that limited fluency in the second language can preclude getting good data unless the researcher can accommodate verbal reports in the participants’ first language (Cohen, 1998). Consequently, I decided to focus exclusively on Korean students since Korean language support was readily available at Utah State University and since Koreans represent a consistently substantial proportion of students in the Intensive English program.

Given this situated research perspective, the following questions were set forth as the focus of this study:

1. What are the vocabulary sizes of intermediate Korean readers in the program?
2. How do these compare with Korean undergraduate students of junior or senior standing?
3. What are the background characteristics of intermediate Korean readers in the program?
4. Are there any systematic relationships between background characteristics and vocabulary size?
5. How do intermediate Korean readers go about making meaning of a challenging text with unknown vocabulary?

### Methods

**Participants**

Participants were solicited from among all Korean students attending level 3 classes at the Intensive English Language Institute at Utah State University during the 2006-2007 academic year. Korean undergraduates having at least junior or senior standing at USU were also invited as a comparison group. Participants received a cash compensation of $50 if they participated in all of the research tasks. Nineteen students agreed to participate in the study (14 Intensive English students and 5 undergraduate students). Eleven of the Intensive English students produced usable data; three were eliminated because they elicited concern on at least two out of three counts: 1) they had error scores higher than 10 on the vocabulary measure, 2) they did not provide answers to all questions on the background questionnaire, 3) they failed to return for the think-aloud training and reading task. (Three of the eleven students remaining did
not participate in the think-aloud phase of the study, but completed the vocabulary assessment and produced complete data on the general background questionnaire, so these data were retained and used for quantitative analyses.

Questionnaire
Students completed a general background questionnaire inspired by one created by Kim and Margolis (2000) to estimate Korean students’ exposure to spoken English. Additions were made to the original questionnaire in order to obtain an estimate of the total number of hours of English instruction that participants had received in their high schools in Korea. In addition, because L2 reading proficiency is partially predicted by L1 reading proficiency (Bernhardt, 2005), the questionnaire was expanded in order to explore exposure to written English, which the Kim and Margolis questionnaire did not do. The intent of these additions was to gather indirect evidence regarding the degree to which the study participants were avid readers in Korean. The assumption, for which there is some empirical evidence, was that participants who were more avid readers in Korean might be more likely to possess superior L1 reading skills that might transfer to the L2 context. (See, for instance, Bernhardt & Kamil, 1995). The adapted questionnaire also included several questions regarding how participants spent their time outside of Intensive English classes. While the questionnaire was written in English, a native-Korean speaking colleague explained and administered the questionnaire and was available to clarify any questions if necessary. (The adapted questionnaire appears in Appendix A.)

Estimation of vocabulary size
Students’ vocabulary sizes were estimated by means of the Swansea Vocabulary Levels Test (Meara, 2005) and the Swansea Advanced Vocabulary Levels Test (Meara & Miralpeix, 2006). These two tests, from a suite of tests known collectively as the Lex Tests, are computer-based tests (downloadable from http://www.swan.ac.uk/cals/calsres/lognostics/) and designed to run on a Windows platform. The user interface is simple and data from the test is stored in ASCII format, so it can be read using any word-processor. The test employs a YES/NO strategy for assessing vocabulary knowledge in a context-free setting and is designed to estimate recognition vocabulary across ten 1000-word frequency bands (K1-K10).
Each program presents a selection of 20 words from five different frequency bands along with four pseudo-words. For each word the student has to decide whether or not he or she knows the meaning of the word and to click on a yes button or a no button. On each of the tests, the program automatically estimates the proportion of real words that the test-taker “knows” in each frequency band and displays a total raw score for the test. The program also calculates an adjusted vocabulary score for each frequency band by subtracting the rate of false-claims (i.e. error scores) from the hit-rate (i.e., the number of real words claimed). In the current research vocabulary size refers to adjusted vocabulary scores.

**Think-aloud training**

Participants were trained in the think-aloud technique (Ericsson & Simon, 1993). First they observed one of the researchers demonstrating the think-aloud method with a text in the researcher’s second language (Spanish). They were then given an unfamiliar text to read in English and asked to verbalize what was going through their minds as they tried to work out an understanding of the text. Participants were initially put in pairs and took turns reading and verbalizing their thoughts to their partner. They were instructed to think-aloud, particularly when they encountered difficulty understanding. After the initial training task, participants individually performed a second training task identical to the research task. As the participants performed this task, a researcher coached them by periodically reminding them to verbalize their thoughts, especially if the participant lapsed into silence for more than 30 seconds. Training continued until each participant felt comfortable with the protocol.

**Reading task**

Study participants were asked to read an authentic text of about 960 words, imagining that they had been asked to read it as a course requirement and that they needed to be able to pass a test on the content of the reading. The text, entitled *Invisible Women* (Choi, 1999), was from *The Bedford Guide for College Writers*, a writing textbook with a wide selection of readings that college freshman are likely to encounter in general education courses in an American university. (The full text appears in
Appendix B.) Participants were instructed to use whatever method they would ordinarily use to work out the meaning of a difficult text. They were told that they could highlight, underline, annotate, take notes, or use a dictionary (bilingual or English only) - whatever they would ordinarily do. They were asked to think aloud as they proceeded, and it was emphasized that they should say whatever was going through their mind, particularly at times when they encountered difficulties understanding the text. They were further instructed that upon reaching the end of a paragraph, they should summarize the paragraph. It was made clear that they could think aloud in Korean or in English, or that they could alternate as they pleased.

Students had access to both a Korean-English dictionary and an English dictionary if they chose to use one in order to determine the meaning of unknown vocabulary. On-line dictionaries were accessed by way of a front-end-GUI (Graphical User Interface) system using C# programming language running on a Microsoft.Net platform. When using the dictionary, students entered the word they wished to lookup in the text box provided by the GUI system which passed the word to an existing English-Korean or English-English dictionary web site (http://kr.dic.yahoo.com/search/eng/). Looked up words were also stored in a Microsoft Access database as a way of monitoring the students’ use of the dictionary during reading.

Throughout the performance of the task, a video camcorder, positioned over the participant’s right shoulder, captured physical interaction with the text (e.g., annotation) and recorded the participant’s verbalizations. Due to scheduling constraints, time allotted for the reading task was held to 25 minutes, and students were interrupted after 25 minutes, regardless of whether or not they had completed the entire reading.

Data analysis
Adjusted scores on both Swansea Levels Tests were combined to yield an estimate of each participant’s total vocabulary. These and all quantifiable data from the background questionnaire were input into a database and descriptive statistics were generated, including correlations between vocabulary size and other variables of interest.

Videos of each subjects’ performance on the reading task were burned to DVD. I
viewed each video several times to get an overall impression and then reviewed each task carefully to produce a narrative description of task performance. The videos were also viewed by a Korean native-speaker who transcribed any utterances made in Korean and translated these into English. A second Korean native-speaker checked the transcripts for accuracy and completeness. The transcripts were coded based on categories derived from Pressley & Afflerbach (1995). There was only one rater, the author, so unfortunately the objectivity of the ratings was not verified by inter-rater reliability measures. The video-recordings and coded transcripts were used to provide a description of each participant’s performance on the reading task.

**Results and discussion**

**Vocabulary size**

Results of the Vocabulary Levels Tests were used to estimate the vocabulary sizes of the Intensive English students and the Korean undergraduate students. Adjusted vocabulary scores and error scores for each subject were compiled by summing the scores for all ten frequency bands of the tests. Means and standard deviations for each group were computed. (These results are summarized in Table 1.) As anticipated, the mean vocabulary score for the undergraduate students was substantially greater than that of the Intensive English students. (This difference was statistically significant ($t(13) = -2.58$, $p = .011$). The high error scores for Intensive English Participants 1 and 3 raised concerns regarding the validity of the estimate for these two participants, since adjusted scores are calculated by reducing the total words that a subject claims by a proportion derived on the basis of false-claims. Participant 1, for instance, actually claimed knowledge of an incredible 8,050 words, which was reduced to a bare 2,800 based on her 21 false claims. Participant 3, while not quite as extreme is a similar case. Their later performances on the reading tasks, however, tend to reinforce the inference that the breadth of their vocabularies is indeed probably lower than any of their peers.
Table 1. Adjusted Vocabulary Scores and Error Scores: Intensive English vs. Undergraduates

<table>
<thead>
<tr>
<th>Participant</th>
<th>Intensive English Students</th>
<th>Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adjusted Score</td>
<td>Error</td>
</tr>
<tr>
<td>1</td>
<td>2800</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>3600</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>4100</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4600</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>4800</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>5000</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>5600</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>5600</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>5700</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>5750</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>6400</td>
<td>7</td>
</tr>
</tbody>
</table>

To determine whether the results of the Levels Tests conformed to the test’s basic assumption that learners are likely to know relatively fewer words at each successive frequency band, trend lines were drawn for each participant across the ten frequency bands (K1-K10). A visual inspection of these trend lines suggested that while there are some obvious irregularities, on the average, estimated vocabulary tends to decrease across frequency bands. An argument can therefore be reasonably made for accepting the test as a valid, albeit, rough measure of the vocabulary levels for most of the participants, except perhaps Intensive English Participants 1 and 3 as discussed previously.

Background characteristics of Korean intermediate intensive English students

Among the Intensive English students that volunteered for this study, women outnumbered men 9 to 2. The youngest was 18 and the oldest 37; most were between 22-24 years old. Time in the U.S. ranged from 3-11 months. Nine had previously attended college in Korea. The average years of attendance among those who reported college attendance was 3.1 years.

The questionnaire covered many different aspects of the students’ previous instruction and general exposure to English, as well as questions related to types and extent of reading in their first language (i.e., Korean). Of particular interest is the relationship between estimated vocabulary size and some of these variables. Table 2
summarizes selected categories of information related to instructional experiences and reading practices in the one year prior to enrollment in the Intensive English Language Institute. As the table shows, variables that one might suspect to be associated with vocabulary size vary widely between subjects. For example, total hours of high school English instruction ranged from a low of 20 hours to a high of 2160. Indeed, each of the variables summarized in the table shows considerable variation.

Table 2. Hours of Instruction in English and Time Spent Reading

<table>
<thead>
<tr>
<th>Vocabulary (total hrs)</th>
<th>High School (total hrs)</th>
<th>Hakwon* (total hrs)</th>
<th>Private (total hrs)</th>
<th>Reading/English (hrs/mo)</th>
<th>Reading/Korean (hrs/wk)</th>
<th>Textbooks (Korean) (hrs/wk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2800</td>
<td>32</td>
<td>1440</td>
<td>192</td>
<td>4.0</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>3600</td>
<td>384</td>
<td>36</td>
<td>0</td>
<td>8.0</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td>4100</td>
<td>216</td>
<td>132</td>
<td>0</td>
<td>1.5</td>
<td>25.5</td>
<td>1.5</td>
</tr>
<tr>
<td>4600</td>
<td>384</td>
<td>116</td>
<td>32</td>
<td>1.5</td>
<td>11.0</td>
<td>4.0</td>
</tr>
<tr>
<td>4800</td>
<td>540</td>
<td>1660</td>
<td>888</td>
<td>0</td>
<td>11.5</td>
<td>4.0</td>
</tr>
<tr>
<td>5000</td>
<td>540</td>
<td>936</td>
<td>0</td>
<td>4.0</td>
<td>8.5</td>
<td>8.0</td>
</tr>
<tr>
<td>5600</td>
<td>1600</td>
<td>576</td>
<td>256</td>
<td>4.0</td>
<td>49.5</td>
<td>12.0</td>
</tr>
<tr>
<td>5600</td>
<td>2160</td>
<td>1008</td>
<td>800</td>
<td>8.0</td>
<td>25.5</td>
<td>12.0</td>
</tr>
<tr>
<td>5700</td>
<td>20</td>
<td>24</td>
<td>24</td>
<td>4.0</td>
<td>48.0</td>
<td>8.0</td>
</tr>
<tr>
<td>5750</td>
<td>2160</td>
<td>0</td>
<td>16</td>
<td>1.5</td>
<td>7.0</td>
<td>12.0</td>
</tr>
<tr>
<td>6400</td>
<td>1152</td>
<td>324</td>
<td>0</td>
<td>12.0</td>
<td>5.5</td>
<td>8.0</td>
</tr>
</tbody>
</table>

* (A hakwon is a private after-school institute, often referred to in English as a ‘cram school.’)

To explore whether there were any statistical relationships between vocabulary size and the variables displayed in Table 2, correlation coefficients were calculated (see Table 3). These suggest a moderate relationship between vocabulary size and total hours of high school English instruction (r = .62) as well as a strong relationship between vocabulary size and textbook reading in Korean (r = .86).
Another interesting analysis involves an examination of vocabulary size in relation to how Korean Intensive English students spend their time outside of class. These data are summarized in Table 4.

Table 4. Hours Per Week Studying and Socializing Outside of Class with Various Groups

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Studying</th>
<th>Americans</th>
<th>Non-Korean Internals</th>
<th>Koreans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2800</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>8.0</td>
</tr>
<tr>
<td>3600</td>
<td>8.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4100</td>
<td>12.0</td>
<td>0</td>
<td>1.5</td>
<td>12.0</td>
</tr>
<tr>
<td>4600</td>
<td>4.0</td>
<td>2.0</td>
<td>0</td>
<td>12.0</td>
</tr>
<tr>
<td>4800</td>
<td>4.0</td>
<td>1.5</td>
<td>0</td>
<td>8.0</td>
</tr>
<tr>
<td>5000</td>
<td>0</td>
<td>0</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>5600</td>
<td>8.0</td>
<td>1.5</td>
<td>0</td>
<td>12.0</td>
</tr>
<tr>
<td>5600</td>
<td>12.0</td>
<td>4.0</td>
<td>1.5</td>
<td>4.0</td>
</tr>
<tr>
<td>5700</td>
<td>4.0</td>
<td>2.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>5750</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>12.0</td>
</tr>
<tr>
<td>6400</td>
<td>8.0</td>
<td>12.0</td>
<td>8.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Totals</td>
<td>63.0</td>
<td>24.5</td>
<td>20.5</td>
<td>79.5</td>
</tr>
</tbody>
</table>

From this table, it is evident that as a group, Korean Intensive English students reported spending more hours per week (79.5) socializing with other Koreans than in any other activity. Hours spent studying (63.0) ranks second. As a group, study participants reported spending only about 24 hours a week socializing with Americans and about 20 hours a week socializing with non-Korean international students. A visual inspection of this data, however, suggests that students with higher vocabulary scores were more likely to socialize with Americans and/or non-Korean international students. In fact, vocabulary size is moderately correlated with the tendency to socialize with Americans and/or non-Korean international students (as indicated in Table 5). It is tempting to hypothesize that Korean students who socialize with non-Koreans benefit from more opportunities to pick up new vocabulary. On the other
hand, it could also be the case that students with more vocabulary are in general more proficient and therefore, more confident in their ability to socialize effectively.

**Table 5. Correlations between Vocabulary Size and Outside-of-Class Socializing**

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>with Americans</th>
<th>with non-Koreans</th>
<th>with Americans and/or non-Koreans</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>.64</td>
<td>.58</td>
<td>.68</td>
</tr>
</tbody>
</table>

**Quantitative analysis of reading task**

Eight Intensive English students participated in the think-aloud reading task. Analyses of their performances, based on close examinations of video recordings and audio transcripts, are illuminating. What follows is first a quantitative analysis of the relative effectiveness of each participant, after which I will present a qualitative analysis.

One measure of reading effectiveness is speed. Given two readers equally invested in understanding a text, one might reasonably suppose that if one reader finishes more quickly than another, then the faster reader is the more effective reader (ignoring for the moment differences in degree of comprehension). Under this assumption, how do the Intensive English students compare with one another? One way to answer this question is to ask which participant finished the task most quickly and to use this time as the index against which to compare all the other participants. Table 6 illustrates these relationships.

**Table 6. Summary data for reading task**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Vocabulary</th>
<th>Approx # words read</th>
<th>% Read 18 minutes</th>
<th># Words looked-up</th>
<th>Look-up rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2800</td>
<td>268</td>
<td>28%</td>
<td>18</td>
<td>1/15</td>
</tr>
<tr>
<td>3</td>
<td>3600</td>
<td>384</td>
<td>40%</td>
<td>19</td>
<td>1/20</td>
</tr>
<tr>
<td>6</td>
<td>4100</td>
<td>508</td>
<td>53%</td>
<td>6</td>
<td>1/85</td>
</tr>
<tr>
<td>2</td>
<td>4600</td>
<td>384</td>
<td>40%</td>
<td>6</td>
<td>1/64</td>
</tr>
<tr>
<td>7</td>
<td>5600</td>
<td>495</td>
<td>52%</td>
<td>8</td>
<td>1/62</td>
</tr>
<tr>
<td>9</td>
<td>5600</td>
<td>700</td>
<td>73%</td>
<td>9</td>
<td>1/78</td>
</tr>
<tr>
<td>5</td>
<td>5700</td>
<td>960</td>
<td>100%</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>6400</td>
<td>806</td>
<td>84%</td>
<td>11</td>
<td>1/81</td>
</tr>
</tbody>
</table>

As Table 6 shows, Participant 5 (with a vocabulary of 5700 words) was the fastest reader, finishing the 960-word text in 18 minutes. On the other hand, Participant 1
(with a vocabulary of only 2800) was the slowest, reading only 268 words or 28% as much in the same time. Overall, Table 6 suggests a systematic relationship between vocabulary size and the relative proportion of the text each reader was able to finish in 18 minutes. This is confirmed by the correlation coefficient ($r = .82$) and a scatter plot showing a strong linear relationship between the two variables (See Figure 1). In general, the larger a participant’s vocabulary, the more of the text the participant was able to read in 18 minutes.

**Figure 1**: Relationship Between Vocabulary Size and Proportion of Text Completed

Table 6 also illustrates the degree to which each participant relied on a dictionary in his/her effort to comprehend the text. This tendency is indicated by the lookup-rate, or the average number of words each participant looked up per running word of text read. The participant with the lowest vocabulary size (2800) looked up, on average, about one in every fifteen words, followed by one in twenty words for the participant with the next to lowest vocabulary size (3600). In contrast, the participant with the largest vocabulary (6400) looked up only one in every eighty-one words, and the participant with the second largest vocabulary (5700) looked up only one word in the entire 960-word text. While the relationship between vocabulary size and look up rate is highly correlated ($r = -.81$), the relationship is not a linear one, and there are several exceptional examples. For example, Participant 6 with a vocabulary of only 4100 looked up only one word in every eighty-five, a look up rate much lower than all but Participant 5, who looked up only one word out of the entire 960-word text. Indeed, a qualitative analysis of each participant’s performance on the reading task suggested
that Participants 5 and 6 were the most skillful readers. I turn now to a consideration of the characteristically different ways in which participants managed the reading task.

**Qualitative analysis of reading task**

While vocabulary size was closely associated with more rapid reading, as discussed above, vocabulary size alone did not distinguish the more skillful from the less skillful readers. For instance, the reader with the largest vocabulary did not appear to be the strongest reader while one of the strongest readers had a rather small vocabulary. Close examination of eight of the Intensive English students by means of video recordings and verbal reports suggested that the most effective readers approached the text in a qualitatively different way. Specifically, the readers that came across as most competent were better able to: 1) compensate effectively for vocabulary limitations, 2) use the text’s syntactic structure to make meaning, and 3) make connections between what they were immediately focused on in the text and the overall argument to which it related. What follows are narrative descriptions and discussion of the performances of four different readers, each with apparently distinctive capabilities. (The readers have all been given pseudonyms.)

**So-jeong**

So-jeong had the lowest adjusted vocabulary score (2800) of all the participants. Viewing her video-recorded efforts to work out the meaning of the text, *Invisible Women*, one cannot help being struck by the impression of floundering that her efforts convey.

She begins immediately with no previewing of the text. She reads the first two sentences aloud:

> For me, growing up in a small suburb on the outskirts of Seoul, the adults’ preference for boys seemed quite natural. All the important people that I knew—doctors, lawyers, policemen, and soldiers—were men.

As she encounters the phrase “*growing up,*” she says its equivalent in Korean and continues reading aloud in English. She underlines *suburb* and *preference* as she goes. It takes one minute to complete this. Immediately upon getting through these first two sentences, she looks up *suburb*, finds the Korean translation and annotates her text.
Next, she turns her attention to the word *outskirt*; she pronounces it many times and seems to be trying to figure out what it means from the context, but after nearly 30 seconds at it, she finally resorts to the dictionary. Again, she finds the Korean translation and annotates her text.

She continues trying to work out the meaning of the first sentence, looking up preference in the process. She concludes (thinking aloud in Korean) that preference has the same meaning as like. She repeats “preference for” several times, seemingly aware of the collocational importance of the preposition for. She asks whether preference is an idiom, and then hits upon the dictionary entry that enables her to resolve the mystery. “Ah-ha, to prefer. Preference for means to prefer something.”

Having now worked on this bit of text for about 3 minutes 45 seconds, she ventures the following interpretation:

> So, growing up in a small suburb on the outskirts of Seoul, I like it more after I get older. Preference?

She still seems puzzled about what preference refers to. Next, she asks: “What does natural mean?” She looks up natural. Then, she concludes, “So, the adults seemed to prefer boys,” finally indicating some understanding of a key proposition. By now 4 minutes 40 seconds have passed. Still, she does not move on. She asks whether natural has another meaning. Noting that natural is an adjective, she then ventures the following:

> They prefer natural law. It seems clear for them to follow the natural law. It is important for everyone, doctors, lawyers—ah-ha, this is it.

It does not seem that she has at all gotten the writer’s point, or rather she passes right over it without recognizing that she has stated it. By this time, 6 minutes have elapsed.

It takes another 6 minutes 42 seconds to finish the first paragraph. By the time she finishes the paragraph, she has looked up 9 of the words in the paragraph. Strategically, she has relied primarily on questioning, followed by guessing, then confirming by consulting a dictionary. It is not clear whether her guesses are instances of retrieval from memory or inferences based on context, but it does not appear that she has understood enough of the text to effectively construct meaning from context.

Her comments at the end of the paragraph are supposed to summarize the ideas of the paragraph, but this summary suggests an idiosyncratic understanding of the passage that does not reflect the writer’s argument:
Men want to live in Seoul. I believe doctors, lawyers, and policemen definitely want to live in Seoul. However, lots of girls want to stay at home, obey and be housekeepers. Daughters have to do housekeeping. They have to help. Nonsense! We have to get rid of this.

These last two remarks appear to be personal responses to what she has understood. So-jeong seems to have understood the writer’s message to be that men and women have different preferences regarding where they live and that girls prefer to stay at home—a situation that she finds unacceptable. Her interpretation contains elements of content from the passage, but she fails to grasp the argument.

So-jeong’s performance continues in much the same way. In 22 minutes, she struggles through only 2 paragraphs (or 266 out of the 960 word essay). The primary activities evident in her transcript are queries related to the meanings of words and observations about words, e.g., meanings, parts of speech, whether a word is a compound, whether a word has been previously encountered, or whether it is new. She looks up a total of 18 words (9 from the first paragraph and 9 from the second), and yet there is almost no evidence of genuine comprehension. The video and think-aloud suggest that her reading is constrained not only by a limited vocabulary, but also by a limited syntactic knowledge, which prevents her from coming to a clear understanding of even isolated propositions. It is no wonder then that she misses the broader argument.

Mi-ae

At 5700, Mi-ae’s vocabulary score, while not the highest, is significantly above the mean (4905) for Intensive English students. Moreover, her handling of the reading task conveys none of the laboriousness observed with So-jeong. In fact, Mi-ae was by far the most efficient reader, finishing the reading task in 18 minutes while no other reader finished in less than 25 minutes.

Mi-ae does not preview the text. She dives right in, reading aloud in English, occasionally rendering portions in Korean. She circles the word men; she underlines housekeepers and housewives. She underlines the word consolation near the end of the paragraph, commenting, “Consolation? I don’t know this word.” However, she does not seem concerned about the unknown word, and simply continues reading. Within 1 minute 50 seconds, she has completed the first paragraph of 162 words. She then immediately paraphrases the paragraph in Korean:
This paragraph says men were able to be important people, but women had to be housekeepers. So the author wanted to be the wife of a president.

At 2 minutes 10 seconds, she is beginning paragraph 2:

These attitudes toward women, widely considered the continuation of an unbroken chain of tradition, are, in fact, only a few hundred years old, a relatively short period considering Korea’s long history.

Her reading of this first sentence involves some backtracking and rereading. The sentence is cluttered with modifying phrases, and she appears to use a processing strategy to separate the main clauses from the long string of modifying phrases.

By 3 minutes 50 seconds, she has finished paragraph 2 and has moved on to paragraph 3:

Throughout the Koryo period, which lasted from 918 to 1392, and throughout the first half of the Yi dynasty, according to Laurel Kendall in her book *View from the Inner Room*, women were important and contributing members of the society and not *marginal* and dependent as they later became.

Paragraph 3 prompts her to slow down and reread several times. She underlines portions as she works. For the first time, she looks up a word—“marginal.” First, however, she reads past the word. Then, she backtracks and reads portions of the text before the word. She appears to be looking for clues that will allow her to infer the meaning from context. Finally, she arrives at the word marginal once again, underlines it, and stops to look it up. She then continues without annotating marginal. (This is the only word in the entire text that she looks up.)

Mi-ae moves quickly through the text (compared with all other readers) finishing in just a little over 18 minutes. There is little verbal evidence of strategic activity. The transcript consists mostly of alternations between quiet reading in English and direct paraphrasing (in Korean), punctuated by end of paragraph summaries. Paragraph summaries are succinct and to the point. The impression is of automatic processing of the text, with instructions to think aloud interpreted as a request for translation. (It is not clear how well the process actually conforms to Mi-ae’s usual approach to reading in this respect, and the researchers failed to probe this issue after the reading.) In summary, the video-recording of her performance and the think-aloud report clearly reveal that Mi-ae reads fluently, monitors comprehension carefully and efficiently, judges the importance of unknown words, skipping over them when they do not seem critical to her developing understanding of the text, uses a dictionary as a last resort,
rereads as necessary, recalls where previously encountered information is located and reviews it as necessary (even when it requires turning pages to locate it). In other words, she exhibits many of the characteristics attributed in the reading literature to good readers.

**Yeon-mi**

Yeon-mi was an interesting case, and one of the most revealing by virtue of her ability to perform the think-aloud procedure in a natural and unselfconscious way. Much of the verbal reporting is in English with occasional switching between English and Korean. Although Yeon-mi’s adjusted vocabulary score is only 4100 (well below the mean of 4905), careful analysis of her video-recorded performance and think-aloud report suggest a skillful reader, able to overcome limitations in vocabulary knowledge with little apparent difficulty.

As Yeon-mi begins the reading task, she takes note of the title, quickly checks on the length of the reading, and then begins at the beginning, ignoring the statement of objectives preceding the reading. She reads aloud quietly in English, underlining outskirts and preferences as she passes over them. She finishes the second sentence within one minute and circles men. She proceeds through the third sentence underlining housekeepers and housewives as she goes, and she circles obey. Yeon-mi pauses briefly after the third sentence, apparently reflecting on the credibility of the claims, then says, “Yeah, in Korea.”

As she continues, she underlines two phrases as she comes upon them: birth of a boy was a greatly desired and celebrated… and girl was a disappointing… Reaching the word accompanied (on the next to last line of the paragraph), she stops: “Accompany, accompany. I know company.” She circles ac- and announces that she will look this word up. She does so and annotates her text. She then asks: “What is the meaning of this sentence?” Continuing from accompany, she reads: “…accompanied by the frequent words of consolation for the sad parents.” She adds to her annotation an additional note, saying, “This meaning is used with ‘with or by,’ there’s by…” noticing the collocation accompanied by. She goes onto the last sentence apparently in an attempt to find a context clue for the meaning of the phrase containing “accompanied by.” She identifies consolation as a problematic word, and looks it up in the dictionary, checking the pronunciation by playing a sound clip, and annotating her text in Korean. The meaning suddenly becomes clear to her; she expresses it in
Korean. “Oh, I see. So after the birth of a girl, parents consoled themselves.” Then she reviews the final sentence. This has taken about 4 minutes 40 seconds (considerably longer than Mi-ae, the fastest reader). However, Yeon-mi summarizes the paragraph effectively in English drawing attention to the distinctions between what the writer felt men became and what women became (in Korean society) and how the writer wanted to be the wife of a president, ending again on what happens when parents have a girl. She notes that the parents “console” suggesting an attempt to generate a verb. She returns to the dictionary—perhaps to try to find “consolate.” (Unfortunately, her action is not captured, but she utters a puzzled, “Mmmm;” perhaps she did not find what she was looking for.)

Going on to the second paragraph, Yeon-mi reads quietly in English, pausing over the word continuation to remark (in Korean), “It is a noun.” Perhaps she recognizes that she knows another form of the word. She continues until the end of the sentence, and remarks, “That’s too long sentence.” Going back to the beginning, she shows evidence of isolating the subject of the sentence and skips over the long modifying phrase to find the main verb phrase. Then, she continues right on to the next sentence. She shows recognition of the historical references in paragraph two and immediately picks up on the significance:

So women were treated as equals during the Koryo period and Yi dynasty. This is the main idea of the paragraph.

Throughout her reading, Yeon-mi encounters a number of problematic words and passages, and she demonstrates a variety of strategies for dealing with them. The transcript reveals many instances where she makes decisions that seem to be based on an evaluation of a word’s importance for understanding the text. Several times, she says, “I don’t know this word; just pass it…” Sometimes she queries, “Do I need the meaning? Yeah, maybe it’s important.” She remembers unknown words that she has passed, and when they recur, she decides that their meaning should be resolved. For instance, when she encounters “privileges” in paragraph 2, she passes it without looking it up. However, when she encounters it again in paragraph 4, she laughs quietly and looks it up.

She seems to use a dictionary only when necessary. When she uses a dictionary, she uses it strategically. When there are several meanings for a word, she attempts to find the one that fits the context, using structural cues when possible (as in the example of “accompanied by” described above). She seems to appreciate the value of using a
dictionary selectively; she usually uses Korean-English although in one instance, she makes a judgment that the English dictionary might be more useful).

When there are clear rhetorical clues to the meaning of a word, she relies on them. For instance, she quickly generates an inference for the word “abased” in the sentence, “Men are honored, but women are abased,” by noticing that they are contrasting ideas. It is not clear whether she has a precise understanding of the word “honored,” but she quickly concludes that “abased is bad meaning.” Within long, complex sentences, she makes judicious decisions regarding where the important information resides, and she abandons what she has decided is unimportant and focuses on trying to understand what she has determined to be important. Despite a fairly limited vocabulary, her knowledge of English syntax seems more than adequate for the task. Moreover, she is good at honing in on the key points.

Watching Yeon-mi read, one gets the impression of a skillful reader, somewhat slowed down by vocabulary limitations, but with an arsenal of skillfully managed compensatory strategies for effectively and efficiently processing a text. She handles the text slowly and deliberately, and while she is not always able to come to a precise understanding of each idea in a paragraph, she appears to know how to simplify a complicated sentence and get to the crux of an argument. Her interpretations are congruent with the main ideas the writer expresses and are not merely idiosyncratic associations to content words or isolated propositions within the text.

Min-cheol

While Yeon-mi demonstrated that vocabulary limitations can be overcome by skillful reading, Min-cheol is a reminder that skillful reading requires much more than a large vocabulary. Of all the Intensive English students tested, Min-cheol had the largest adjusted vocabulary (6400). However, despite a superior vocabulary, he does not appear to be a more effective reader than Yeon-mi (at 4100). He is quicker, to be sure, but there is a vagueness in his verbal report that makes one doubt his grasp of the author’s precise argument.

He begins by taking note of the stated objectives for the reading. He spends about 40 seconds reviewing these. He seems to be clear about what he needs to get from the text. He comments that the text is an essay. He announces that he will skim the text first and goes through a process that resembles previewing—reading the first and last
sentences of each paragraph. In other words, he applies many of the general strategies typically introduced in reading courses. This takes about 2 minutes. Upon finishing, he reviews the objectives and concludes in answer to the first question on whether, historically speaking, the position of women in Korean society has changed or remained much the same. Min-cheol concludes, based on his preview of the text, that women’s status has changed. Then, he announces his intention to begin a “thorough reading.”

During this more careful reading phase, vocabulary-related strategies are in evidence, e.g., querying words, using word structure to try to infer meaning, using a dictionary. Min-cheol also raises queries regarding the meanings of particular sentences. For example:

Does this sentence mean that daughters help their mothers’ careers and things changed overall?... Does this mean that women who were mimicking the stereotype were considered the best?... Does this mean that women lost their identity, and once they were married, they became natal?

Min-cheol’s verbal reports, when they are not word queries or sentence queries, often give evidence merely of recognition of topic or purpose as opposed to precise comprehension of the writer’s arguments:

This is to overview the history. Yi dynasty. Koryo dynasty and Yi dynasty are presented....The highest achievement. An unbroken chain of tradition. It is talking about the past. I believe ‘these attitudes’ are key in this sentence.

He sometimes responds with a personal opinion, or an explanation as to why the author makes a particular assertion:

The author thought that the highest status for a woman was a president’s wife because the author lived in countryside... Women should obey men. This is right.

There is rarely evidence of any attempt to carefully parse syntax in the same way that Mi-ae or Yeon-mi do, but when he does, he gets it wrong. Relevant portions of paragraph 3 appear below:

Throughout the Koryo period... women were important and contributing members of the society and not marginal and dependent as they later became. Women were, to a large extent, in command of their own lives. They were permitted to own property and receive inheritances from their fathers. Wedding ceremonies were held in the bride’s house, where the couple lived, and the wife retained her surname...
Min-cheol gives the following interpretation:

Marginal? I knew what ‘margin’ was, but I didn’t know this. Oh, this is an adjective. Women’s most important contributions in the society were not as marginal but as dependent. They were influenced most by their fathers.

He misses the contrastive “but,” concluding that during the time periods in question women were dependent rather than independent, and he seems to grant “their fathers” more weight than the author’s argument warrants. In general, Min-cheol rarely appears to go beyond local, word and sentence-level queries to try to establish more global, text-level coherence.

Overall, the sense that one gets from observing Min-cheol is that of a perplexed reader, as captured in an exclamation about two-thirds of the way through the task: “What is this? What is this all about?” It is hard to avoid the impression that Min-cheol’s dominant strategy is to search for a connection between his word knowledge and his personal knowledge of the topic. It is as if he understands the key content words and the least complex propositions of the text, and from these, he pieces together a probable interpretation, based on his assumptions regarding the topic. This is a strategy that may belie limitations in syntactic processing ability and possibly more global discourse processing skills. For this reason, Min-cheol comes across as a poor reader with highly developed, top-down compensatory skills.

**Conclusion**

This study highlighted the important role of recognition vocabulary as a critical component of effective second language reading and revealed that Korean students in the third level of a four-level Intensive English program varied widely in a breadth measure of English vocabulary. The students, all in the U.S. for less than a year, had come to their Intensive English program experience from a largely EFL preparation in Korea. The moderately high correlation between vocabulary size and number of hours of high school English instruction suggests that a substantial investment of time in high school English classes may give some students a lexical advantage over those who receive less high school instruction. It is not clear from this study, however, how far this advantage extends beyond laying the lexical foundation needed for fluent reading.

Video analysis and content analysis of student’s verbal reports during their reading
of an essay from a popular college writing text suggest a clear relationship between a student’s vocabulary size and the time the student required to complete a think-aloud reading task. The greater time-investment and heavier reliance on a dictionary exhibited by students with smaller vocabularies is not inconsistent with analyses as those of Nation (1990) and Laufer (1992, 1997) suggesting that students whose vocabularies do not meet a certain minimum threshold are unlikely to be able to read with a high degree of fluency or comprehension.

More subjectively perhaps, I also found some indications of individual differences in syntactic knowledge. Although the research protocol did not include a formal measure of syntactic knowledge, the two readers who conveyed the most convincing impressions of skillful reading, Mi-ae and Yeon-mi, showed through visible action (pointing within the text) and verbal comment what could be inferred as clear evidence of superior syntactic knowledge. In the case of Yeon-mi, this appeared to help her circumvent her vocabulary limitations so that she actually outperformed students with larger vocabularies. Min-cheol, on the other hand, despite having the largest measured vocabulary, appeared to be a “top-down” reader lacking in the “bottom-up” syntactic processing skills needed for truly skillful reading. These observations are also congruent with scholarly opinions regarding the importance of syntactic skill as an essential component for successful second language reading (Barnett, 1986; Eskey, 1988).

The current research is not, of course, without its limitations. The challenges inherent in collecting and interpreting think-aloud reports have been widely discussed (Ericcson & Simon, 1993; Pressley & Afflerbach, 1995), and I have certainly encountered many of them in this limited study. Just as some participants were clearly better readers, some were better able to think aloud. While most participants did seem able to forget about the camera and the presence of a researcher, several never did seem to overcome their self-consciousness. As a result, some participants produced considerably more elaborate reports than others. It is difficult to know the extent to which self-consciousness, verbal reserve, or mere absorption in the problem may have caused a participant to seem less skillful.

However, the use of video recording in combination with think-aloud reports proved fruitful in giving a reading teacher a privileged glimpse of those aspects of student performance during reading that usually remain invisible and are not really fully revealed through post-reading assessments. The process has helped the author
appreciate that the sometimes painfully slow reading (and the difficulty grappling with in-class reading tasks) among some students in his intermediate reading course may not be merely a symptom of boredom or reluctance, but may highlight limitations due to lack of lexical and syntactic resources.

In conclusion, while the class-room setting that motivated this study included a wide range of elements and activities, including instruction on comprehension strategies and text structure, close observation of study participants during reading in a laboratory setting tends to lend support to Pang’s (2008) argument that “L2 readers need to cross the so-called language threshold to be able to develop and apply cognitive and metacognitive strategies in the L2 reading context.” Pang’s assertion implies that second language readers may not be able to make the most effective use of cognitive and metacognitive strategies if they lack sufficient lexical and syntactic resources. This recognition should disabuse reading teachers of any unrealistic notions regarding the possibility of raising students to significant levels of competence in reading merely by trying to equip them with compensatory strategic abilities.

Finally, I believe the teacher who pursues this kind of research, if only as an aid to professional development, is likely to gain a greater awareness of the individual differences in the abilities of readers ostensibly at the same level in a program.

Acknowledgments

My sincere appreciation to Dr. Annie Inhae Kim, Lecturer in Korean and in Asian Studies at USU, for her assistance with translation and general Korean-language support, without which this project would not have been possible.

References


Appendix A

Background Questionnaire. Please circle the appropriate response(s) and/or fill in the blanks.

1. Age: ___  2. Sex: Male / Female  3. Check one: USU undergrad  IELI student

Before you came to USU

4. Did you attend another university in an English-speaking country? Yes  No
   If yes, for how long __________

5. Did you attend a university in Korea? Yes  No
   If yes, for how long __________

6. Did you take university English classes in Korea? Yes  No
   If yes, how many courses? __________

7. Did you receive instruction in English in elementary school? Yes  No

8. Did you receive instruction in English in middle school? Yes  No

9. Did you receive instruction in English in high school?
   a. From a native English-speaking instructor  Yes  No
      How many months _____  How many hours/week _____
   b. From a non-native English-speaking instructor?  Yes  No
      How many months _____  How many hours/week _____

10. Did you ever receive instruction in English at a hakwon?
    a. From a native English-speaking instructor  Yes  No
       How many months _____  How many hours/week _____
    b. From a non-native English-speaking instructor?  Yes  No
       How many months _____  How many hours/week _____

11. Did you ever receive instruction in English from a private tutor?
    a. From a native English-speaking instructor  Yes  No
       How many months _____  How many hours/week _____
    b. From a non-native English-speaking instructor?  Yes  No
       How many months _____  How many hours/week _____
12. In the one year before you came to USU, **how many hours/month** did you spend doing the following **in English**...? Check the appropriate columns.

<table>
<thead>
<tr>
<th>Hours/month</th>
<th>Almost Never</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>More than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Watching tv</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Watching movies/dvds/video</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Listening to radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Listening to tapes, cds, other sound recordings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Conversing with a native english-speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Conversing with another non-native english speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Reading (newspapers, magazines, books, comic books, webpages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Chatting via Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Writing e-mail or letters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Writing essays or school related assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. In your own honest opinion, how motivated are you to improve your English?

<table>
<thead>
<tr>
<th>Very motivated</th>
<th>So-so</th>
<th>Not at all motivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

14. In the one year before you came to USU, **how many hours/week** did you spend **reading** each of the following **in Korean**...? Check the appropriate columns.

<table>
<thead>
<tr>
<th>Hours/week</th>
<th>Almost Never</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>More than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Comic books</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Novels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Short Stories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Poetry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Non-Fiction books</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Internet news articles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Webpages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. How long have you been here at USU? ________________

16. Outside of university classes, how do you spend your time?

<table>
<thead>
<tr>
<th>Hours/week</th>
<th>Almost Never</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>More than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Studying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Socializing/doing activities with Korean friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Socializing/doing activities with non-Korean Internationals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Socializing/doing activities with American students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B
Invisible Women
Yun Young Choi

1. For me, growing up in a small suburb on the outskirts of Seoul, the adults’ preference for boys seemed quite natural. All the important people that I knew—doctors, lawyers, policemen, and soldiers—were men. On the other hand, most of the women that I knew were either housekeepers or housewives whose duty seemed to be to obey and please the men of the family. When my teachers at school asked me what I wanted to be when I grew up, I would answer, "I want to be the wife of the president." Because all women must become wives and mothers, I thought, becoming the wife of the president would be the highest achievement for a woman. I knew that the birth of a boy was a greatly desired and celebrated event, whereas the birth of a girl was a disappointing one, accompanied by the frequent words of consolation for the sad parents: "A daughter is her mother’s chief help in keeping house."

2. These attitudes toward women, widely considered the continuation of an unbroken chain of tradition, are, in fact, only a few hundred years old, a relatively short period considering Korea’s long history. During the first half of the Yi dynasty, which lasted from 1392 to 1910, and during the Koryo period, which preceded the Yi dynasty, women were treated almost as equals with many privileges that were denied them during the latter half of the Yi dynasty. This turnabout in women’s place in Korean society was brought about by one of the greatest influences that shaped the government, literature, and thoughts of the Korean people—Confucianism.

3. Throughout the Koryo period, which lasted from 918 to 1392, and throughout the first half of the Yi dynasty, according to Laurel Kendall in her book View from the Inner Room, women were important and contributing members of the society and not marginal and dependent as they later became. Women were, to a large extent, in command of their own lives. They were permitted to own property and receive inheritances from their fathers. Wedding ceremonies were held in the bride’s house, where the couple lived, and the wife retained her surname. Women were also allowed freedom of movement—that is, they were able to go outside the house without any feelings of shame or embarrassment.

4. With the introduction of Confucianism, however, the rights and privileges that
women enjoyed were confiscated. The government of the Yi dynasty made great efforts to incorporate into society the Confucian ideologies, including the principle of agnation. This principle, according to Kendall, made men the important members of society and relegated women to a dependent position. The government succeeded in Confucianizing the country and encouraging the acceptance of Confucian proverbs such as the following: "Men are honored, but women are abased." "A daughter is a ‘robber woman’ who carries household wealth away when she marries."

5. The unfortunate effects of this Confucianization in the lives of women were numerous. The most noticeable was the virtual confinement of women. They were forced to remain unseen in the anbang, the inner room of the house. This room was the women’s domain, or, rather, the women’s prison. Outside, a woman was carried through the streets in a closed sedan chair. Walking outside, she had to wear a veil that covered her face and could travel abroad only after nightfall. Thus, it is no wonder that Westerners traveling through Korea in the late nineteenth century expressed surprise at the apparent absence of women in the country.

6. Women received no formal education. Their only schooling came from government textbooks. By giving instruction on the virtuous conduct of women, these books attempted to fit women into the Confucian stereotype—meek, quiet, and obedient. Thus, this Confucian society acclaimed particular women not for their talent or achievement but for the degree of perfection with which they were able to mimic the stereotype.

7. A woman even lost her identity in such a society. Once married, she became a stranger to her natal family, becoming a member of her husband’s family. Her name was omitted from the family chokpo, or genealogy book, and was entered in the chokpo of her in-laws as a mere "wife" next to her husband’s name.

8. Even a desirable marriage, the ultimate hope for a woman, failed to provide financial and emotional security for her. Failure to produce a son was legal grounds for sending the wife back to her natal home, thereby subjecting the woman to the greatest humiliation and to a life of continued shame. And because the Confucian ideology stressed a wife’s devotion to her husband as the greatest of womanly virtues, widows were forced to avoid social disgrace by remaining faithfully unmarried, no matter how young they were. As women lost their rights to own or inherit property,
these widows, with no means to support themselves, suffered great hardships. Thus, as Sandra Martielle says in *Virtues in Conflict*, what the government considered "the ugly custom of remarriage" was slowly eliminated at the expense of women’s happiness.

9. This male-dominated system of Confucianism is one of the surviving traditions from the Yi dynasty. Although the constitution of the Republic of Korea proclaimed on July 17, 1948, guarantees individual freedom and sexual equality, these ideals failed to have any immediate effect on the Korean mentality that stubbornly adheres to its belief in the superiority of men. Women still regard marriage as their prime objective in life, and little girls still wish to become the doctor’s wife, the lawyer’s wife, and even the president’s wife. But as the system of Confucianism is slowly being forced out of existence by new legal and social standards, perhaps a day will come, after all, when a little girl will stand up in class and answer, "I want to be the president."