AN ANALYSIS OF CRITICAL THINKING AND MOTIVATION IN A KOREAN UNIVERSITY EFL CLASSROOM

Andrew Steven Parker
Hamline University

Follow this and additional works at: https://digitalcommons.hamline.edu/hse_all
Part of the Education Commons

Recommended Citation
Parker, Andrew Steven, "AN ANALYSIS OF CRITICAL THINKING AND MOTIVATION IN A KOREAN UNIVERSITY EFL CLASSROOM" (2016). School of Education Student Capstone Theses and Dissertations. 4237.
https://digitalcommons.hamline.edu/hse_all/4237

This Thesis is brought to you for free and open access by the School of Education at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education Student Capstone Theses and Dissertations by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu, lterveer01@hamline.edu.
AN ANALYSIS OF CRITICAL THINKING AND MOTIVATION
IN A KOREAN UNIVERSITY EFL CLASSROOM

by

Andrew Steven Parker

A capstone submitted in partial fulfillment of the requirements for
the degree of Master of Arts in English as a Second Language.

Hamline University
Saint Paul, Minnesota
December 2016

Primary Advisor: Julia Reimer
Secondary Advisor: Jennifer Ouellette-Schramm
Peer Reviewer: Andrew Langendorfer
To 수연, Oliver, and Clara.
# TABLE OF CONTENTS

CHAPTER 1: Introduction ........................................................................................................... 1
  Guiding Questions ................................................................................................................ 4
  Role of the Researcher ......................................................................................................... 4
  Summary ............................................................................................................................. 6
  Chapter Overviews ............................................................................................................. 6

CHAPTER 2: Literature Review ................................................................................................ 9
  English in Korea .................................................................................................................... 10
    Background ....................................................................................................................... 10
    The Modern Korean Classroom ..................................................................................... 12
  Teaching Methodology Applied in Context .................................................................... 13
  Critical Thinking ............................................................................................................... 15
    Defining Critical Thinking .......................................................................................... 15
    Identifying Critical Thinking in the Classroom ......................................................... 16
  Motivation .......................................................................................................................... 18
    Dörnyei’s L2 Motivational Self System .................................................................... 21
  Questions Still Needing to be Answered ........................................................................ 22
  Summary ............................................................................................................................. 24

CHAPTER 3: Methodology ...................................................................................................... 25
Discussion of Method ................................................................. 26
Participants and Setting .................................................................. 26
Data Collection Tools ..................................................................... 28
  Motivation Background Survey .................................................. 28
  Intervention: Critical Thinking Lessons ...................................... 29
  Post-intervention Survey ............................................................. 33
  Follow-up Critical Thinking Survey .......................................... 34
Analysis of Data ............................................................................ 38
  Data Verification .......................................................................... 38
  Discovering Relationships Within Results .................................. 39
  Qualitative Data .......................................................................... 40
Ethics ............................................................................................ 40
Summary and Preview ..................................................................... 41
CHAPTER 4: Results ....................................................................... 43
  Motivation Background Questionnaire ...................................... 44
    Ideal L2 Self ................................................................................ 46
    L2 Learning Experience ............................................................. 47
    Ought-to Self .............................................................................. 49
    Inferential Analysis ................................................................... 49
  Post-intervention Questionnaires .............................................. 51
  Follow-up Critical Thinking Questionnaire ............................... 55
Summary ....................................................................................... 63
CHAPTER 5: Conclusions ............................................................... 64
LIST OF TABLES

Table 1. Consensus List of Critical Thinking Cognitive Skills and Sub-Skills .......... 17
Table 2. Stroupe’s Determination of Critical Thinking Skills According to Level ........ 18
Table 3. Post-interaction Questionnaire ........................................................................ 34
Table 4. Follow-up Critical Thinking Survey in Two Parts ......................................... 37
Table 5. Motivation Background Cronbach’s Alpha, Mean, and Standard Deviation .... 45
Table 6. Correlations Between the Branches of the L2 Motivational Self System .......... 50
Table 7. Post-intervention Questionnaire – Day 1 ......................................................... 53
Table 8. Post-intervention Questionnaire – Day 2 ......................................................... 53
Table 9. Possible Outside Influences on Behavior During Class – Day 1 ....................... 55
Table 10. Possible Outside Influences on Behavior During Class – Day 2 ................. 55
Table 11. Follow-up Critical Thinking Cronbach’s Alpha, Mean, and Standard Deviation ......................................................................................................................... 58
Table 12. Percentage of Negative Responses to Critical Thinking Behavior Items ........ 59
Table 13. Percentage of Negative Responses to Defined Critical Thinking Learning Items ......................................................................................................................... 59
Table 14. Follow-up Critical Thinking Responses ....................................................... 60
CHAPTER ONE

Introduction

English is taught as a second language both in schools and private language
*hagwons* or private academies for students of all ages. As a major component of the
education, Korean authorities are often looking abroad at programs in North America as
well as in Asia, Europe, and elsewhere to find new ways of teaching English more
effectively. However, there is often little consideration for the specific context in which
these methods are applied in Korea (Eun, 2001; McKay, 2009). Through this study, I
hope to analyze the relationship between critical thinking in the Korean English
classroom and Korean students’ language learning motivation. In answering the research
questions, I hope to gain a little more perspective on how this relationship can be
exploited to improve the effectiveness of English education in Korea, in the classroom
and on the curriculum of Korean educational institutions.

English, though a foreign language to most Koreans, has a very high level of status
in Korea. Young children often start learning it at language schools even before attending
kindergarten, and it is a mandatory subject from elementary school through university.
English proficiency exams are a determining factor in university admissions (Eun, 2001),
and finding better employment is often the reason Koreans study English in university or
even after graduation (Kim, 2009).

Because of the importance Korean society places on English, there is a lot of time
and effort expended on the teaching of it. The government plays a large role in
establishing policies that determine what and how the language should be taught and how proficiency should be assessed. This mostly comes in the form of a standardized school curriculum with official textbooks, national standardized tests, and mandated pedagogical methodology (Eun, 2001; McKay, 2009; Shin, 2007). The result of English’s role in society and the policies created to manipulate it has been to turn language learning into a competitive industry in which scores and levels are often seen as criteria with which one can advance his or her career, communicative competency often an afterthought (Choi, 2008; Life, 2013; O’Donnell, 2006).

This competitive, exam-centered focus has created an environment in which students expect their English classes to be directly related to improving test scores. Most English classrooms focus on grammar forms and vocabulary needed to pass tests and students often show little interest in language learning. In a study conducted in a high school classroom in Korea, Pottorff (2004) noted that students expressed real surprise and bewilderment at the concept that extensive reading would improve their reading and writing test scores but their motivation to read and write was not changed until they actually began to see the results of such exercises.

Communicative language teaching (CLT), defined by Yoon (2004), as a general term to describe teaching scenarios in which communication is the primary objective in the classroom, and in particular, teaching English through English (TETE), defined as “establishing English as the main language of communication between students and instructors” (Kim cited in McKay, 2009, p. 1), are concepts that are now being tested in Korea, but data regarding their effectiveness is still not clear (Eun, 2001; McKay, 2009). With regard to motivation and student interest in their English language classes, however,
some studies have shown that these can be increased with the inclusion of more active thinking and communication-based lessons (Pottorff, 2004; Thoman, Sansone, Fraughton, & Pasupathi, 2012). These active, communicative approaches can be characterized as having components that incorporate analysis and evaluation, an exchange of personal opinion, agreement and disagreement, among others. These components are also often cited as those that apply to critical thinking (Facione, 2015; Lipman, 1987; Paul & Elder, 2001).

Although the above behaviors can describe what critical thinking looks like, explicitly defining it can be more troublesome. Facione (2015), interestingly, claims that defining the term is counterproductive. This may be a thought-provoking approach to take when exploring the concept, but when looking at it from a more practical standpoint, it becomes necessary to have a working definition. Lipman, in his 1987 evaluation of critical thinking, claims that many definitions of critical thinking are vague and do not adequately describe what he considers to be critical thought. Instead, he proposes that “critical thinking is skillful, responsible thinking that facilitates good judgment because it relies upon criteria, is self-correcting, and is sensitive to context” (p. 39). For the purposes of this paper, critical thinking will be defined as such unless otherwise specified.

Critical thinking as an educational concept has been around for decades, and there has been some controversy over whether or not it should or even can have a place in the classroom (Atkinson, 1997; Davidson, 1998). More recently, this controversy seems to have lost steam and educators now see critical thinking as a natural part of the classroom (Stroupe, 2006). Other studies have shown that an ability to use critical thinking is
correlated with better academic performance (Facione, 2015; Fliegel & Holland, 2013). These findings are important because they show a connection between thinking behaviors and classroom behaviors. In studies specifically of EFL classrooms, others have found that critical thinking can help promote communicative competence (Pally, 2001; Şeker & Kömür, 2008; Stroupe, 2006). However, there is little research on this topic that takes into account the Korean context—that is, how critical thinking affects a learner who has spent much time studying English grammar, vocabulary, and test taking strategies for the purpose of achieving higher scores in standardized tests, and who may or may not have English-medium interpersonal communication in mind as the primary outcome of their studies.

**Guiding Questions**

To address this issue, this paper attempts to examine the following questions relating to the Korean university EFL environment and critical thinking:

1. What types of motivation do Korean university students bring to the university EFL classroom?
2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?
3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?

**Role of the Researcher**

To answer these questions, I conduct a study employing Likert surveys and teaching interventions in a classroom at a university in Korea which specializes in in the aerospace industry. In the years I have been teaching in Korea, I have often witnessed
firsthand a lack of motivation or a lack of interest in the students toward English education. Almost all will admit to needing English to graduate or to get jobs upon leaving university but fewer seem to find value in the communicative classes taught by native English-speaking teachers in Korea. It is often seen as preferable to take lecture style classes in which students listen passively to a teacher explaining grammar rules or giving test-taking advice. This could be due to a low estimation of their own English ability, or a reflection of the modesty shown by students in traditional Korean culture (Life, 2013). Alternatively, this could be caused by the enormous pressure on students to score well on standardized tests and a belief that the best way to do this is rote memorization (Choi, 2008; Pottorff, 2004). No matter the reason, it is a frustrating thing to teach students who refuse to participate and who seem to have very little interest in a class, or do not want to do work unless they can see precisely how it will benefit their test scores.

Professionally too, this issue is of importance to me. Based on my observations, it is quite common for students to study English for long periods of time, even taking time off school in many cases, to focus on attaining a TOEIC, TOEFL, or IELTS score required for college entrance or to meet an employment standard. In many of those cases, students then fail to achieve their desired result, and out of necessity, change their course of study or their career path. I have seen also students whose knowledge of English grammar rules and vocabulary rivals that of many or even most untrained native speakers, and yet, a large percentage of these students would fail to put together a single sentence if confronted with a situation in which they were required to speak English unprepared. If, in fact, a change in teaching methods, or a new focus on another style of
learning can help improve students’ attitudes towards English education, and in turn, their ability to communicate in English, it must be explored.

**Summary**

This paper describes a study of the relationship between critical thinking and the motivation of Korean university engineering students in EFL classes. It examines the background motivation that a group of students brings to the classroom, presents those students with a learning environment designed to promote critical thinking, and asks them to provide feedback on both the learning experience and their general feelings toward the inclusion of critical thinking in the Korean EFL classroom.

The purpose of this research is to better understand how critical thinking affects EFL learning in a Korean university context—one in which the students often have more interest in grades and English standardized test scores than they do in using English as a means of interpersonal communication. A better understanding of this issue has the dual benefits of creating a classroom that is more interesting to the students, which will hopefully provide more intrinsic motivation, and providing students with a more effective method to achieve the grades and test scores that they need in order to succeed in competitive Korean society.

**Chapter Overviews**

In Chapter One, the context in which students study English in Korea was outlined and their general approach to language study was described. This underlined the importance of improving teaching practices within the scope of the Korean classroom, with special attention paid to how the context may be affecting communication, behavior, and interaction. My background regarding the topic was introduced, as was my role in the
research and the fundamental topics I intend to cover. In other words, How does critical thinking relate to motivation in the Korean EFL classroom, and do the students appreciate the use of critical thinking in the classroom?

Chapter Two provides a review of the literature relevant to this research. This includes the state of English in Korea; the study of motivation, interest, behavior, and self-efficacy; the relationship between these and critical thinking; the definition, measurement, and analysis of critical thinking; the manifestations of critical thinking in the classroom; and the teaching methods associated both with Korean EFL classrooms and critical thinking. Finally, it lays a foundation to help determine answers to the following research questions: What types of motivation do Korean university students bring to the university EFL classroom? How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus? In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?

Chapter Three details the methodology used in the study and describes the setting and the procedures. It provides an explanation of the data collection tools, provides samples of those tools, and describes how they will be used to collect relevant data. Finally, it gives an overview of the potential ethical issues involved in this particular study, and outlines the actions taken to avoid any problems. Chapter Four reports on the results of the data collection tools, analyzes the results and interprets them with regard to their relevance to the research questions. Chapter Five reflects on the research questions, the data collection process, its results, and the literature review. It also discusses
limitations of the study and identifies potential areas for future research. Finally, it reflects on the experiences of the author of this capstone.
CHAPTER TWO

Literature Review

This study was devised to better understand the relationship between critical thinking and motivation in a Korean university EFL classroom. In particular, it focuses on the types of motivation Korean university students possess and how they react to lessons designed to include elements of critical thinking. English education in Korea places a strong emphasis on grades and test scores and it is my belief that this leads to a lack of interest and participation in a communicative classroom. By observing students during the application of different critical thinking skills, this study attempts to discover if motivation is increased through activities that promote the use of critical thinking. To address this issue, this paper attempts to examine the following questions relating to the Korean EFL environment and critical thinking:

1. What types of motivation do Korean university students bring to the university EFL classroom?

2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?

3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?
This chapter begins with an overview of literature on topics concerned with the study including English in Korea, its importance, and how it is learned; the relationship between teaching methods and teaching context; critical thinking, how it is defined, measured, and analyzed; and finally motivation, interest, and behavior related to these, as well as a framework for better understanding these concepts. It explores the relationship between these concepts and then highlights areas in which this research is lacking or fails to take into account certain extenuating circumstances that open the door for further study.

**English in Korea**

**Background**

English holds an important place in Korean society. As was already mentioned, it is included in the National Scholastic Aptitude Test, which determines university acceptance (Eun, 2001; McKay, 2009; Shin, 2007) and is used in companies to determine promotions and raises (Kim, 2009). English has also been considered a catalyst for change, initially as a language brought by missionaries that symbolized a democratizing force against the ruling class, later as a symbol of freedom brought by the US military after the Japanese occupation from 1910-1945, and currently, as a way to increase status in an increasingly globalized world (Shin, 2007). Most students start studying at private English language schools called *hagwon* before they start elementary school (McKay, 2009), and it is not uncommon to hear stories about particularly famous teachers at the most popular of these schools making millions of dollars per year (Mundy, 2014; Ripley, 2013).
Despite the overall societal need for English, there has historically been relatively little interest in interpersonal communication in English. On the contrary, students and teachers alike look to grammar, vocabulary, and the ability to score well in tests as the primary reason to study English (Eun, 2001; O’Donnell, 2006). Choi (2008) cites a traditional emphasis on testing in Korea as a factor in this. He explains that historically, passing a government service exam was the only way for someone in the peasant class to rise above his station, and in doing so, to elevate the status of his whole family. The need for English to be quantifiable, for example, as a way to distinguish a better candidate for a job may be another reason. There is also a common conception that English for communication and English for test-preparedness require separate teaching methodologies and therefore most focus on non-communicative methods to teach the latter (Choi, 2008; Eun, 2001; Pottorff, 2004).

The traditional notion of a classroom in Korea, too, encourages a less participatory form of language study. A strong emphasis placed on teacher qualifications and a belief that the “pedagogical expertise” teachers have also creates an environment in which the teacher is somehow a model whose lectures are to be paid attention to closely (O’Donnell, 2006; Shin, 2007). Life’s (2013) experience as a teacher in Korea lead him to conclude that the students’ low evaluation of their own abilities, as well as an inherent modesty or shyness prevents them from speaking out in classes. All of these factors together create a situation in which English ability is desired but avoided at the same time. Students and teachers alike are frustrated because although English is so important, fluency is often ignored and a score becomes the goal rather than communication.
The Modern Korean Classroom

Despite the focus on grammar, vocabulary, and test preparation discussed, there have been changes in Korea toward more communicative teaching methods (Eun, 2001; McKay, 2009; Yoon, 2004). The sixth version of the Korean national curriculum, implemented between 1995 and 1996, began the first push for CLT in Korea (Shin, 2007; Yoon, 2004). According to Yoon (2004), however, teachers and administrators thought that it went too far, and that accuracy was being sacrificed for fluency, so the seventh version, which was implemented in 2001, introduced goals of teaching grammar and functions of the language through English itself rather than through Korean, a step toward TETE.

In practice, however, the pedagogy that is being used is often not communicative. In a survey of Korean English teachers, Eun (2001) found that although most expressed positive feelings toward CLT, they admitted to not using CLT in class. When asked why it was difficult, teachers cited reasons such as large class sizes, difficulty in providing assessments, lack of time, too many grammatical and lexical items to cover, little support from administrators, lack of CLT-based materials, lack of training, mixed level classes, low level classes, and having students who were more familiar with a traditional, passive learning style. Many even had difficulty defining it. Jeon (2009), who surveyed teachers before the communicative approach was implemented and again twelve years later, found similar results. In her conclusion, she makes suggestions to improve the state of CLT in Korean schools including raising awareness about what it is, giving teachers better training in its implementation, helping provide better materials for use in the classroom, reforming the assessment system, and providing motivational support for teachers.
Yoon (2004) also notes that despite the attempt to create a curriculum that focuses on the function of the language structures being taught, classes still use synthetic syllabi, which depend on grammatical forms being the primary basis for instruction and cannot fundamentally be communicative. Therefore, any attempt to improve the situation must start with a new national curriculum.

**Teaching Methodology Applied in Context**

Findings that language teaching methodologies are not as compatible in some contexts as they are in others, or that due to cultural or traditional circumstances, are misunderstood or misapplied such as those explored in the previous section, are not unusual in Asian EFL classrooms. Littlewood (2007) explored this in an assessment of task-based language teaching (TBLT) and of CLT in general throughout East Asia. Citing examples in Hong Kong, mainland China, and South Korea, he found that teachers had classroom management issues when lesson plans deviated from the traditional structures, that students frequently avoided English in favor of their first languages when completing tasks, that the tasks were often too easy and did not require enough language to complete, that TBLT methods were not compatible with assessment methods in place, and that these methods conflicted with traditional classroom environments. McKay (2009) noted many of the same difficulties in her examination of the Teaching English Through English (TETE) movement in Korea. She also points out that research has yet to be conducted which proves that either the insistence on English-only instruction in the classroom or on classes being conducted solely through CLT are more effective than other, more familiar methodologies in Korea. Therefore, she argues, requiring that teachers focus on such methodologies may be premature.
Another study of a university in Thailand adopting a task-based model as opposed to a grammar-based curriculum by McDonough and Chaikitmongkol (2007) showed that at least initially, students and teachers had a hard time adjusting to the new methods, but as students became more familiar with the class and started to see results, they admitted that the new method was superior. This may only serve to underscore the importance of context however, as the teachers in this study did not have to contend with many of the problems listed by the teachers in Eun’s (2001) and Jeong’s (2009) surveys cited earlier, and may owe their success to the lack of educational infrastructure within which they had to conduct their trial. In other words, they may have been able to teach in an experimental vacuum of sorts and did not have to work within the confines of a rigid curriculum or accommodate stakeholders beyond the teachers and students with whom the study was directly concerned. Eun (2001) echoes this assessment that “the global spread of English and related discourses have not provided relevant theories and approaches for EFL classrooms by ignoring different contexts of classrooms” (p. 162).

As described above, implementing CLT in Korea as a technique that must be followed without defining it, supporting it, and without regard for context does not necessarily produce the results desired. Clark (2009) argues that rather than pursuing specific pedagogical techniques or attempting to define things like critical thinking, educators should be trying to inspire students to connect with the class material more personally. She suggests that being more attentive to the students and providing them with innovative materials will bring the results.

Educators must ask themselves if they truly understand how their methods are producing the results they are getting. Batstone (2012) argues that research on the
effectiveness of TBLT methods may not actually be getting the whole picture and suggests that the context in which tasks are performed may play a large role in the results researchers receive, and therefore context and actual classroom happenings need to be studied in more detail to provide real answers to research questions.

**Critical Thinking**

Critical thinking as a thing to be studied poses a number of problems. As previously mentioned, defining a term such as critical thinking can be problematic. That major obstacle aside, a number of authors consider it to be something unique to Western academic environments and claim that including it in English as a second language curricula does a disservice to students who might not have had a focus on such conventions in their academic upbringing (Atkinson, 1997; Ramanathan & Kaplan, 1996). Others disagree. Norris (1985), for example, argues that “critical thinking is an educational ideal… Students have a moral right to be taught how to think critically” (p. 44). However, as this paper is concerned with motivation in relation to critical thinking, and not with the question of whether it should or can be taught, these arguments are not relevant and will not be discussed in detail here.

**Defining Critical Thinking**

A quick search will find a wide variety of definitions and interpretations of critical thinking. Paul and Elder’s (2009) definition of critical thinking as “the art of analyzing and evaluating thinking with a view to improving it” (p. 2) is interesting but seems too focused on metacognition to be applicable to communicative activities in a language classroom. A definition that better fits EFL, as mentioned earlier, comes from Lipman (1987). He defined critical thinking as “skillful, responsible thinking that facilitates good
judgment because it relies upon criteria, is self-correcting, and is sensitive to context” (p. 39). Criteria are explained as a sort of rule or boundary within which the thinking takes place. He gives some examples such as standards, objectives, laws, and conventions. Self-correction, in his view, goes beyond meta-cognition in that it is always looking to improve, not just analyze. Finally, context is considered important because it allows exceptions for, or even modifies the criteria used in the thinking process, and the thinker must always be sure that his or her thinking is within a proper context. This definition is broad enough to be adapted to fit many situations yet specific enough to be observable and does not require a sense of constant skepticism or social commentary in its application.

**Identifying Critical Thinking in the Classroom**

Facione (2015) actually refuses to define the term in his introductory pamphlet on the topic and instead expands upon a list of skills and sub-skills determined by consensus of a panel of experts convened by the American Philosophical Association (Facione, 1990) seen in Table 1. The skills consist of interpretation, analysis, evaluation, inference, explanation, and self-regulation. These are important because they lay the groundwork for being able to identify critical thinking. Stroupe (2006) cites Wakefield’s observation that three of Facione’s skills, analysis, synthesis, and evaluation, correspond to the highest three levels in the cognitive domain of Blooms’s Taxonomy. Other researchers too, define critical thinking in terms of higher order thinking skills (Şeker & Kömür, 2008). By doing this, matching these skills to those used in the classroom becomes much clearer.
Table 1. Consensus List of Critical Thinking Cognitive Skills and Sub-Skills

<table>
<thead>
<tr>
<th></th>
<th>Interpretation</th>
<th>Analysis</th>
<th>Evaluation</th>
<th>Inference</th>
<th>Explanation</th>
<th>Self-Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>- categorization</td>
<td>- examining ideas</td>
<td>- assessing claims</td>
<td>- querying evidence</td>
<td>- stating results</td>
<td>- self-examination</td>
</tr>
<tr>
<td></td>
<td>- decoding significance</td>
<td>- identifying arguments</td>
<td>- assessing arguments</td>
<td>- conjecturing alternatives</td>
<td>- justifying procedures</td>
<td>- self-correction</td>
</tr>
<tr>
<td></td>
<td>- clarifying meaning</td>
<td>- analyzing arguments</td>
<td></td>
<td>- drawing conclusions</td>
<td>- presenting arguments</td>
<td></td>
</tr>
</tbody>
</table>


A number of studies have looked at how critical thinking has been used in the classroom, mostly to determine what effect it had on learning in both native speakers (Fliegel & Holland, 2013) and ESL environments (Benesch, 1999; Pally, 2001; Şeker & Kömür, 2008). To do so, they have had to determine what rubrics to use. Stroupe (2006), for example, based on his reading of Facione, determined which skills could be employed across all the EFL courses offered at different levels of the program at his Japanese university. Table 2 illustrates his breakdown of skills. By doing this, he has shown that critical thinking can and does take place in EFL classrooms at all levels to different degrees depending on the material being covered.
Table 2. Stroupe’s Determination of Critical Thinking Skills According to Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced</strong></td>
<td>• developing and supporting references argumentative essays</td>
</tr>
<tr>
<td></td>
<td>• judging credibility of a source</td>
</tr>
<tr>
<td></td>
<td>• comparing and evaluating educational systems</td>
</tr>
<tr>
<td></td>
<td>• formulating new [sic]</td>
</tr>
<tr>
<td></td>
<td>• explaining decision processes and rationales for answering TOEFL/grammar questions</td>
</tr>
<tr>
<td></td>
<td>• comparing/contrasting literary themes,</td>
</tr>
<tr>
<td></td>
<td>• evaluating main points in an essay with appropriate evidence</td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td>• Proposing possible solutions to global problems</td>
</tr>
<tr>
<td></td>
<td>• identifying and (peer) evaluating paragraph structure</td>
</tr>
<tr>
<td></td>
<td>• explaining decision processes and rationales for answering TOEFL/TOEIC/grammar questions</td>
</tr>
<tr>
<td><strong>Basic</strong></td>
<td>• Agreeing/disagreeing with statements (with support)</td>
</tr>
<tr>
<td></td>
<td>• identifying and (peer) evaluating sentence structure</td>
</tr>
<tr>
<td></td>
<td>• explaining decision processes and rationales for answering TOEFL/TOEIC/grammar questions</td>
</tr>
<tr>
<td></td>
<td>• Agreeing/disagreeing with statements (with extended answers)</td>
</tr>
<tr>
<td></td>
<td>• offering options, predicting outcomes of conversations</td>
</tr>
<tr>
<td></td>
<td>• comparing and contrasting</td>
</tr>
<tr>
<td></td>
<td>• ranking according to importance (with explanations)</td>
</tr>
</tbody>
</table>


**Motivation**

Motivation has been shown to be a strong determiner as to the success of language education (Dörnyei & Ushioda, 2011; Fernández & Cañado, 2001; Gardner & Lambert, 1959; Kelly, 2004). Researching it, however, can be problematic because collecting data that accurately explains what is being observed is not always possible. Yang and Kim’s (2011) case studies involving two Korean students whose stated motivations and goals...
did not correspond to their actual behaviors illustrate this point well. The two students had reported different learning goals before left to study English abroad in different countries. The first had cited spoken interaction with native speakers as a primary goal while the second hoped to improve her English writing. When observing their actual behaviors abroad, however, Yang and Kim found that the former had increasingly spent his free time with members of his L1 community and focused his studies on TOEIC scores while the latter had focused on building relationships with English-speaking locals. Fernández and Cañado (2001) cite Madrid’s contention that since motivation cannot be directly observed, motivation research cannot actually explain behavior—it can only describe behavior. Dörnyei & Ushioda (2011) echo this when they state that motivation affects the “direction and magnitude of human behavior” (p.4), but that beyond this, researchers may not agree on a more specific definition.

Generalities aside, researchers indeed have developed some ways to study motivation, which have benefited second language researchers greatly. Dörnyei & Ushioda (2011) credit Gardner and Lambert (1959) for introducing the concepts behind L2 motivation research today. In that 1959 study of English-speaking French learners in Canada, Gardner and Lambert determined that success in learning a second language was tied both to aptitude but also to motivation. They also determined that those with integrative motivation, which they “characterized by a willingness to be like valued members of the language community” (p. 271), were more likely to succeed than those with instrumental motivation, or motivation based on the tangible positive effects of learning the language.
Later, acknowledging more and more the individual circumstances of each language learner, Gardner (1985) expanded his ideas and presented the *Socio-educational Model*. In this, he included individual differences categorized as intelligence, language aptitude, and situational anxiety along with motivation as influences on the language learning experience.

More recent frameworks have been developed which further distinguish types of motivation in a L2 learner. Dörnyei (1994) created a three-level framework in which he attempted to address the environments where language learning takes place. This included the language level, in which integrative and instrumental motivation interact; the learner level, which accounts for things like self-efficacy and a learner’s basic studiousness; and the learning situation level, which incorporates motivational aspects of the language course itself, the teacher, and the group dynamics within the classroom. Tremblay and Gardner (1995) found it advantageous to include persistence, attention, goal specificity, and causal attributions in their study of French students and used a model in which goal salience, valence, and self-efficacy were the determiners of motivational behavior.

Research has also shown motivation in individual learners to be dynamic. Williams and Burden describe two types of motivation they call initiating and sustaining motivation which operate on a continuum of language learning motivation including “reasons for doing it,” “choosing to do it,” and “keeping it up” (cited in Dörnyei & Ushioda, 2011, p. 61). Ushioda explains that a learner’s motivation often initially comes from outside experience related to the learning of other languages or other experience, but as the learner progresses, the motivation shifts towards motivation intrinsic to the
language being learned or to plans for the future regarding the language (cited in Dörnyei & Ushioda, 2011). In her autobiographical study of how she acquired English, Lim (2002) describes how her motivation increased and decreased over periods based on a number of internal and external factors.

The status of the language itself may also play a part in a person’s motivation. The global spread of English has created a situation in which English speakers are no longer necessarily associated with particular nationalities. Because of this, learners may have integrative motivation without a feeling of connection to any specific set of English speakers (Dörnyei & Ushioda, 2011; Lamb, 2004). In a study of Japanese university students, Yashima (2002) determined that to many of these students, English symbolized the world outside Japan and that some students showed more interest in this than others. She called this international posture and found that students possessing this trait were more willing to communicate than those without it. Similarly, Lamb (2004) found during interviews with students in provincial Indonesia, that the most often cited reason for needing to study English was globalization.

Dörnyei’s L2 Motivational Self System

Looking to improve upon Gardner’s Socio-Educational Model of second language acquisition and relying upon previous theories of multiple selves, Dörnyei (2005) introduced what he called the L2 Motivational Self System. In this, he proposes that L2 motivation is made up of the ideal self; a sort idealized version of one’s L2 speaking self; the Ought-to Self, made up of the things that a person feels he or she should be able to do to avoid negative consequences; and the L2 Learning Experience, any number of variables relating to the learning environment itself. Later, he would add that the ideal
self contains what are often called integrative and internalized instrumental motives, the Ought-to Self, more extrinsic instrumental motives, and gave examples of L2 Learning Experience which included “the impact of the teacher, the curriculum, the peer group, [and] the experience of success” (Dörnyei, 2009). Others have also included behaviors like self-regulation in this as well (Kim & Kim, 2014).

Researchers using Dörnyei’s System have found the L2 self easier to study than the more abstract concept of integrativeness, (Kim, 2012; Dörnyei, 2009; Taguchi, Magid, & Papi, 2009), valid when used to study learners of different levels and cultural backgrounds (Taguchi, Magid, & Papi, 2009), and better at predicting and explaining English proficiency in young Korean learners (Kim, 2012). For these reasons it will be utilized in this study.

**Questions Still Needing to be Answered**

The topics covered above have previously been researched thoroughly and much can be learned from this research. For instance, research on Korean EFL classrooms has shown that despite the relative importance of English in Korean society, English education lacks in the instruction of communicative skills and focuses strongly on test preparation, giving clues as to why changes in curriculum and methodologies have so far not produced the desired results. Research on critical thinking has shown that it can be taught and quantified, and that it leads to language learning success. Motivation research has shown that it is complex but measurable, and that it is correlated with improved L2 learning.
There has also been research done on the relationships between many of these topics. However, there are few connections between these research areas, particularly in an EFL classroom and specifically in a Korean university.

In their study of students in different undergraduate majors at US private colleges, Garcia and Pintrich (1992) found a positive correlation between motivation and what they called *deep strategy use*, identified as a form of critical thinking. However, they also found that critical thinking varied much among the different fields of study observed due to the differences in the natures of the fields themselves making the results hard to generalize or transfer to non-native speaking English students in an EFL class.

More recently, and concerning EFL, Yang, Chuang, Li, and Tseng (2012) found in their study of English learners in Taiwan, a location which they too describe English instruction as focused on test taking rather than interpersonal communication, that using certain computer programs they could improve both critical thinking skills and English proficiency. Motivation was a key concept throughout the design of the study, including when choosing computer programs and in the lessons, which were designed to provide a motivating experience for the participants. However, the study did not attempt to find any direct connection between critical thinking and motivation.

In essence then, this study is an attempt to fill that gap, to explore the idea that by encouraging certain ways of thinking in the English language classroom, either through the use of certain methodologies or through utilizing materials which foster such thinking, a student’s motivation to learn can be increased. Additionally, it aims to investigate the possibility that this could lead to improvements in the way English is
taught in Korea. To address this issue, this paper attempts to examine the following questions relating to the Korean EFL environment and critical thinking:

1. What types of motivation do Korean university students bring to the university EFL classroom?

2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?

3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?

**Summary**

This chapter has reviewed some of the literature regarding the stated research questions. First, it looked at the history and current state of English language education in Korea including the importance of context in regard to teaching methodology. Next, it looked at critical thinking, how it is defined and how it is measured. Then, it covered some of the ways in which motivation operates within the learner and how it could be related to the classroom.

Chapter Three describes the methods used to answer the research questions, providing detail about the procedures and tools used. It explains how these are utilized to collect data and they are analyzed to illustrate the ways in which they are designed to answer the research questions.
CHAPTER THREE
Methodology

Chapter Two reviewed some of the literature regarding the stated research questions relating to the history of English language education in Korea, English learner motivation, and critical thinking in the context of the language learning classroom. This chapter outlines the methodology used in this study. This study aims to address the following questions relating to the Korean university EFL environment and critical thinking:

1. What types of motivation do Korean university students bring to the university EFL classroom?

2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?

3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?

First, this chapter discusses the methods used in this study and describes the rationale behind it. The setting and participants are described in the context of the study and how tools and materials are used to accomplish it. The data collection methods are presented and discussed in terms of how they are used to answer the research questions.
Finally, ethical issues related to the human participants, how consent was given and how confidentiality was maintained is explained.

**Discussion of Method**

To determine answers to the stated questions this study examines the background motivation of the participants, it exposes participants to classroom interventions in which they are encouraged to utilize critical thinking in order to accomplish language objectives, and it examines both motivation and awareness of critical thinking skills utilized during the interventions. This is accomplished through mixed-methods, classroom-based research conducted via questionnaires. Questionnaires can be useful for measuring concepts such as motivation or other, not directly observable concepts (Dörnyei & Csizér, 2012; Mackey & Gass, 2005). To look into the critical thinking aspects of the questions, Macaro (as cited in Mackey & Gass, 2005) gives a number of ways to conduct research regarding cognitive processes, processes with which this study partially defines critical thinking. One such method is simply asking learners via survey, or directly what they think on the issue. Therefore, questions which directly enquire into the participants’ thoughts regarding critical thinking in the English language classroom are included. The quantitative data collected from the methods above is analyzed using both descriptive and inferential statistics and the qualitative data in the form of the questionnaire responses to the open-ended critical thinking based questions are used to support and add further depth to the analysis.

**Participants and Setting**

This study took place at a Korean University in the greater Seoul metropolitan area. The university is a relatively small technical school that focuses on flight and engineering
in the aerospace industry. The majority of the student body is male but aside from this
gender discrepancy, the school is not unusual in Korea in either its campus or its student
composition.

The course used for this study was a required, second-semester freshman-level
English speaking and listening course. The author received permission from the regular
instructor and the school to teach and conduct research over a period of two days. During
this time, the study took place in two sections of the course containing 21 and 23 students
respectively, all of whom consented to participate. All the participants were between the
ages of 18 and 25. Some were taking the course for the first time but others were retaking
it after receiving a poor grade. The lesson materials used in the study were new to all.
Participants in both classes were at varying levels of proficiency and although a formal
assessment was not done, most were estimated to be between the high A1 and low B2
levels as defined by the Common European Framework Reference (CEFR). Many of the
male students in particular were returning to school after taking between 2 and 4 years off
for mandatory military service and had not been in an English classroom since then. This
is significant because completion of military service is a milestone for Korean men that
often implies a level of maturity and a need to take more responsibility for work and
school (Breen, 2004). Some students had also taken time off of school to study at
specifically focused private institutes or hagwons in Korean, or to study/travel abroad.
One student in particular had just returned from a one-year working holiday in Australia.
Because of this, some students had significantly higher communicative English skills
than others.
Data Collection Tools

To answer the first research question, What types of motivation do Korean university students bring to the university EFL classroom? a six-point Likert questionnaire was created to assess the motivation background of the participants. To answer the second research question, How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus? a second questionnaire was created which asked questions specifically relating to the activities in the intervention. To answer the third research question, In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English? a final Likert questionnaire was created to assess students’ feelings towards critical thinking based classroom practices and towards critical thinking in the English classroom in general. In all cases, optional, open-ended questions were included at the end of the questionnaire in order to provide some qualitative data to be used to further analyze the results.

Motivation Background Survey

At the start of the first day but prior to the start of the actual intervention, students were given a survey to chart their English learning motivations. According to Dörnyei’s L2 Motivational Self System (Dörnyei, 2005; Dörnyei, 2009), motivation can be broken up into three categories, the ideal L2 self, the ought-to L2 self, and specific situational learning experiences. Based on this system, students were asked questions pertaining to their motivations in the form of a six point Likert questionnaire. The responses could range from strongly disagree to strongly agree.
Kim and Kim (2014), when studying the effects of self-regulation behaviors in Korean school students, modified a questionnaire from Taguchi, Magid, and Papi (2009). The original was used to validate Dörnyei’s system (Dörnyei, 2005; Dörnyei, 2009) as well as to evaluate whether or not it was generalizable to diverse subject groups, especially in terms of integrativeness, as well as to determine whether instrumentality should be broken into two categories, promotion and prevention, which Taguchi, Magid, and Papi (2009) define both as measurements of self-regulation, the former dealing with personal goals and aspirations and the latter dealing with requirements and responsibilities. Their conclusions were affirmative in both cases. In their study, Kim and Kim (2014) tailored many of the questionnaire items to better fit a Korean environment. Because this study intended to get a background picture of motivation in a Korean environment, a questionnaire based upon both Kim and Kim’s and Taguchi et al.’s instruments was created. Appendix A gives the questionnaire in English. Students were provided a bilingual version in both English and Korean. Additionally, the version students were given does not include subheadings, and questions are randomized so that categories within the questionnaires would not be readily identified. The questionnaire was administered online with students participating via their mobile devices.

**Intervention: Critical Thinking Lessons**

The second data collection tool, detailed later on, was a survey of students, given twice, each time following a class designed to highlight critical thinking. The lessons were each 100 minutes in length and were conducted on a Thursday and the following Monday. The class lessons were based on objectives and a course book provided by the original course instructor but materials had been developed by this researcher with
additional critical thinking in mind. Because the original objectives were mostly
grammar-based, the lessons were to be taught more or less in isolation from lessons
taught by the regular instructor, and the actual classroom contact time was limited, it was
determined that a present, practice, produce-style lesson with use of specific language
forms being identified the primary language objectives would be most efficient. To stress
critical thinking, however, an inductive approach was utilized whenever possible. Critical
thinking skills were identified using Facione’s (1990) determination of critical thinking
cognitive skills and sub-skills as seen in Table 1. Summaries of the lessons follow; see
Appendices B and C for full lesson plans including detailed language objectives.
Additionally, a list of which activities potentially enlisted which critical thinking skills
can be seen on the lesson plans.

The first lesson began with a warmup in which students identified emotions from
photographs. Once some language was modeled, participial adjective forms were
identified and students distinguished between -ed and -ing endings. Students attempted
to come up with rules for their usages before an explanation was given. Students were
provided controlled speaking practice using the forms. Using some model structures, the
lesson transitioned from the vocabulary focus to the grammar focus, real conditional
forms. Rules were elicited from students before an explanation was given, followed by
controlled practice in which groups of 4 or 5 students identified appropriate adjectives,
selected the appropriate endings, and related their answers to each other orally. In the
production phase of the lesson, students were shown slides containing pictures of
common scenarios. In groups, students discussed how they usually behave when in such
scenarios. The lesson finished with an open-ended discussion of feelings and behaviors
associated with the day’s lesson. During the discussion, the teacher observed and noted
down errors in student speech, adding them to a list of errors noted during previous
activities. The noted errors consisted of common items frequently misused and errors in
the targeted language forms were highlighted. Then, the teacher wrote a selection of
errors on the board, attempting to categorize or group them in such a way that students
might benefit from seeing them. Finally, the students attempted to identify and fix the
errors in groups before going over the answers as a whole class. The lesson was then
reviewed briefly and the next lesson was previewed.

The second lesson, taking place on a Monday following the previous Thursday
lesson, was structured similarly but since the language objectives remained the same, it
was designed to elicit more uncontrolled production than controlled practice as in the
previous lesson. Selected language objectives and targeted critical thinking skills can be
seen on the lesson plan in Appendices B and C. To warm up, students were shown a
comic about “off-line shopping” and were asked to think about differences between that
and shopping on the internet. The teacher elicited a few examples and reformulated them
into real conditional forms as a review from the previous day. The teacher then
transitioned the class from a discussion of shopping behaviors to a discussion of
behaviors regarding superstitions about which students completed a reading activity. This
lead to some more semi-controlled oral practice of the grammar forms in groups of four
or five. Then, the teacher gave a short explanation of the future real conditional and how
it differs from the present real conditional followed by more controlled practice in which
groups of students discuss choices they might make in their future and a review of
relevant modals to be used to discuss future possibility. The main part of the lesson was a
sort of role-play in which students imagined themselves to be lost at sea on a sinking yacht. They were given a list of items critical to their survival but were told that they must choose only a small number that they are able to carry off the sinking ship. They negotiated within their group until they came up with a consensus and the results were compared both among the other groups as well as to an actual list supposedly provided by the US Coast Guard. Results were discussed and alternative ideas were proposed and justified. Depending on how much time remained, the discussion turned back to superstitions, and students were asked to interpret the meanings behind some commonly held ones. This was followed by an open-ended discussion on human behaviors and beliefs in general. As in the previous lesson, the teacher noted errors made by students throughout the lesson and at the end, categorized and listed them on the board. Students then attempted to identify and correct the errors themselves before they were discussed as a class.

The purpose of these activities was to give the students something interesting to talk about that required them to think critically about their ideas. Paul and Elder (2009, p. 7) claim that lower order thinking “frequently relies on gut intuition,” that it is “unreflective,” and that it is “largely self-serving.” In their view, the highest order thinking is “explicitly reflective” and that it contains the “routine use of critical thinking tools in analyzing and assessing thinking.” To that end, students were encouraged during the class to be evaluating and making changes to their ideas as they evolved. Stroupe’s (2006, p. 51-52) list of practical critical thinking examples in an ESL classroom gives us “judging credibility of a source,” “comparing and contrasting,” “evaluating,” and
“explaining decision processes and rationales.” The open-ended speaking activities and discussion questions in the lesson are designed to reflect this.

**Post-intervention Survey**

After each of the two intervention lessons, students received another survey to measure their opinions of the activities. Cohen and Dörnyei’s (2001) questionnaire on motivation of an individual language task served as the basis for these questions. Their questionnaire, however, was developed to gather student feedback on larger, over-arching tasks that possibly were completed over a number of classes or even over a number of weeks, and specifically, they were looking at self-regulation behaviors that are not the focus of this research. Due to the limitation on time available to gather data in this particular study, and the focus on critical thinking rather than self-regulation, this sort of data collection tool is not appropriate. Therefore, a more generalized version was created with the intent to capture similar motivational data from participating students but from a perspective that matches the format and objectives of the lesson detailed above.

Additionally, in an attempt to identify any mitigating circumstances that might have had an effect on the students’ reaction to the lessons, a number of questions were added to the questionnaire. These questions refer to influences outside the lesson material itself that may, according to Dörnyei (2005, 2009), affect the L2 Learning Experience. These include factors such as the classroom environment or potential distractions, among others.

Table 3 gives the six-point Likert questionnaire in English. Students were provided a bilingual version in both English and Korean. Additionally, the version students were
given did not include subheadings and questions were randomized. The questionnaire was administered online with students participating via their mobile phones.

Table 3. Post-interaction Questionnaire

<table>
<thead>
<tr>
<th>General feelings about the lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Today’s activities were useful to improving my English.</td>
</tr>
<tr>
<td>• The activities were interesting.</td>
</tr>
<tr>
<td>• The activities helped me speak English better.</td>
</tr>
<tr>
<td>• I worked hard during the activities.</td>
</tr>
<tr>
<td>• I would like to participate in activities similar to these in the future.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible outside influences on behavior during class</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The classroom environment (e.g. the table arrangements, group size, partners) affected my participation in class.</td>
</tr>
<tr>
<td>• I was confused about how to participate in the activities.</td>
</tr>
<tr>
<td>• I was nervous about taking part in the activities.</td>
</tr>
<tr>
<td>• I was distracted during the activities.</td>
</tr>
<tr>
<td>• The activities were too easy.</td>
</tr>
</tbody>
</table>

**Follow-up Critical Thinking Survey**

The final data collection instruments were administered after all interventions were finished. At the end of the second lesson, after students had completed the second reaction survey, students were given a two-part questionnaire. The first part asked students to reflect on some behaviors associated with critical thinking and to think about to what degree they agreed that these behaviors were appropriate in an English language classroom. The behaviors highlighted in the questionnaire were chosen because they are behaviors that the participants would be used to engaging in in a university level English language classroom—particularly one taught by a nativespeaking instructor—as well as because they loosely corresponded to Stroupe’s (2006) determination of critical thinking skills according to level in his Japanese university English language courses.
In an attempt to see what the participants would consider critical thinking to be, and whether or not they shared the definition of such a concept with the researcher, the first part of the questionnaire made no attempt to identify the selected behaviors as pertaining to critical thinking whatsoever, or to influence their value in the eyes of the participants in any way. Instead, it simply asked to what degree participants agreed that the behaviors were appropriate in the English classroom. Later items in the questionnaire, however, required that the participants have a working definition of critical thinking in mind as they addressed the concept directly and that the aforementioned definition be somewhat similar to that used as the basis of this research. Therefore, the questionnaire was split into two parts, the first having no particular instructions beyond those of a standard Likert questionnaire, while the second contained a working definition of critical thinking which preceded the questions themselves. Upon completion of the first part, participants went directly on to answer the second part.

Additionally, the second part of the survey provided participants with an opportunity to leave comments after each of their Likert responses. The purpose of this was to allow them to leave anonymous feedback pertaining to each of the items on the questionnaire. This was optional and participants were allowed to leave responses in Korean or English.

Finally, in the consent forms signed by the participants, there had been a notice that they may be contacted and asked further questions by the researcher to elaborate on some of their answers. They were reminded of this in this final questionnaire.

Table 4 gives the two-part, six-point Likert questionnaire in English. Students were provided a bilingual version in both English and Korean. Additionally, the version
students were given does not include subheadings and questions are randomized though
the description of the purpose of the research and working definition of critical thinking
were included in the second part of the questionnaire. The questionnaire was
administered online with students participating via their mobile devices.
Table 4. Follow-up Critical Thinking Survey in Two Parts

<table>
<thead>
<tr>
<th>Thoughts on Critical Thinking Behaviors in the English Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teachers should encourage students to discuss thoughts and give opinions in English class.</td>
</tr>
<tr>
<td>• It's OK to disagree with other people's opinions during English class.</td>
</tr>
<tr>
<td>• English class is a good place to compare Korean culture with other cultures.</td>
</tr>
<tr>
<td>• Trying to explain something in English rather than switching to Korean is important, even when it's difficult.</td>
</tr>
<tr>
<td>• Trying to figure out unknown words using context is a better way to learn them than to use the dictionary.</td>
</tr>
<tr>
<td>• When I don't understand something my teacher says, it's important to ask him or her rather than asking for another student to explain later in Korean.</td>
</tr>
<tr>
<td>• Students should listen and absorb what a teacher says in English class.</td>
</tr>
<tr>
<td>• Disagreeing with other peoples’ opinions isn’t appropriate in English class.</td>
</tr>
<tr>
<td>• The primary focus of English class should be on memorizing vocabulary and grammar.</td>
</tr>
</tbody>
</table>

The purpose of this research is to see how students feel about critical thinking in their English classroom. For the purpose of this research, critical thinking could be described as thinking using careful reasoning to come up with ideas. Also, people who think critically understand that they are not perfect and therefore they try to evaluate and improve their ideas if possible. The following questions are related to this.

<table>
<thead>
<tr>
<th>Thoughts on Critical Thinking Itself in the Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The primary focus of English class should be on memorizing vocabulary and grammar.¹</td>
</tr>
<tr>
<td>• Why or why not? (optional)</td>
</tr>
<tr>
<td>• Using critical thinking in the English classroom helps me to learn English.</td>
</tr>
<tr>
<td>• Why or why not? (optional)</td>
</tr>
<tr>
<td>• Classrooms that employ critical thinking are more fun and interesting.</td>
</tr>
<tr>
<td>• Why or why not? (optional)</td>
</tr>
<tr>
<td>• When I use critical thinking in the English classroom I am more motivated to study, learn, and or speak English.</td>
</tr>
<tr>
<td>• Why or why not? (optional)</td>
</tr>
</tbody>
</table>

¹ This question was inadvertently duplicated on this portion of the survey due to an editing mistake after the survey was returned from the translator. The original item should have read, “Critical thinking should be a part of the English language classroom.”

The consequences of this mistake will be discussed in the following chapter.
Analysis of Data

Data Verification

The data collected in each of the categories in the questionnaires used in this study must be shown to be similar in order for the results to be meaningful. This need represents the differences between a Likert and a Likert-type survey. Boone and Boone (2012) cite Clason and Dormody’s clarification of the differences between a Likert and Likert-type survey and note that though they resemble each other in terms of the questions which they employ, and the options a respondent has to choose from, they differ in that individual items can be grouped so that they can be said to measure a common trait or characteristic. Therefore, as this survey was intended to do just that, all items within each group must be checked for reliability.

To do this, Zaiontz (2013) recommends using Cronbach’s alpha, which can measure internal reliability between items in a questionnaire, over other analyses because of its flexibility and general compatibility with Likert data. In his primer on using questionnaires in research, Dörnyei (2003) states that the most thorough questionnaires should contain at least 10 items with which to measure a specific trait and that Cronbach’s alpha for such a group should be around .80 or higher. Due to the complexity of L2 research, however, ten-item groups can make a questionnaire unreasonably long. Therefore, if smaller groups of three to four must be used, they could still be considered reliable with an alpha of greater than .60.

If such results are not achieved, the data must be cleaned or it will not be reliable (Dörnyei, 2003). For example, items may require reverse coding to account for negative wording in the original questions. Or, they may need to be dropped from the results if
their removal creates a Cronbach’s alpha in the acceptable range and enough items are left in the category of the questionnaire to retain validity. The need for this can be due to poor wording in the question, improper translation, different cultural expectations between the researcher and participants, or for some other, unforeseen reason.

The data from this study was entered into the computer using SPSS version 15 and analysis was used to determine via Cronbach’s alpha whether or not the items in each category were reliable. If items were determined not to fit, they were modified or removed.

Secondly, a normal distribution for each of the individual items in the motivation background questionnaire, as well as for the categories in the questionnaire as a whole were found and this was compared to other research which had also relied upon the L2 Motivational Self System. This showed both how individual participants, and the entire population, responded to each of the items on the questionnaire. This also gave an indication of whether or not the participants in this study fit the profile of learners who had participated in other, related studies.

Discovering Relationships Within Results

Results pertaining to the entire population were analyzed using a combination of parametric and non-parametric inferential analyses. Descriptively, the results were illustrated using their arithmetic means and standard deviations in order to determine the impact of the result. Inferentially, correlations between results pertaining to the undefined critical thinking based behaviors and the defined critical thinking questions, or differences between reactions to lesson one and lesson two based on the follow-up
surveys were sought. The eventuality that no significant difference in results between lessons would be found was considered as well.

   The null hypothesis was determined to be that no correlation existed within the data and it was tested using SPSS to see if there were correlations between aspects of the L2 Motivational System, responses to the critical thinking opinion questions, and reactions to the individual lessons. For example, Did learners with certain types of motivation profiles respond differently to certain types of lessons? Or, was there any relationship between opinions on critical thinking and reaction to classroom activities? Finally, correlations between reactions to the activities and certain parts of the L2 Motivational Framework were sought.

**Qualitative Data**

   Though no generalizable conclusions were likely to be made based on any of the data collected in this study, the follow-up questions on the surveys were developed to provide qualitative data which could be analyzed to support with more depth, the primarily quantitative analysis of the above survey data.

**Ethics**

   This research in no way deceived the participants, who were all legal adults in both the United States and the Republic of Korea at the time of the study, nor did it pose any significant threat to their wellbeing. Nonetheless, steps were taken to gain their consent to participate in the research and to protect their privacy. Additionally, consent to conduct the research was obtained from the university at which the study was conducted.

   The intervention lessons were taught to the entire class by the researcher but the researcher was not the primary instructor and was not grading nor testing the students on
the material taught during the class so as to avoid any conflict of interest. The material taught by the researcher was developed by the researcher but came from objectives on the general course syllabus, which was written by the primary instructor. This was so that the students would not be missing any content from the standard course as a result of their participation in the research. Students were informed that their participation in the research was completely voluntary and that they were able to stop participating at any time.

Questionnaires were completed by participants using Google Forms on the participants' own smartphones. Participants only needed a URL, which was written on the board, to access the questionnaires. Logging into accounts was not necessary and names were not asked for on the questionnaires.

In order for the researcher to be able to select specific participants for potential follow-up interviews, and to allow for analysis of data based on an individual participant’s responses, participants were assigned numbers by the primary instructor which they included on the questionnaires, but this information was not known by the researcher. If an interview was desired, the researcher would be able to give the number of a participant to the primary instructor who would, in turn, inform the researcher of the identification of the participant.

The questionnaire data exists only on a password-protected Google account and, as mentioned above, does not contain any identifying information.

**Summary and Preview**

This chapter outlined the methods of data collection in this study, namely the surveys conducted and the intervention in the form of critical thinking-oriented lesson
plans. Secondly, it explained how the data would be analyzed in order to answer the stated research questions. Finally, it described the potential ethical issues related to the research and the steps taken to minimize any risk to the participants. Chapter Four presents the results of this study by reporting and analyzing the results of the questionnaires to find patterns in and to explain connections between the data.
CHAPTER FOUR

Results

Chapter Three described the methodology used in the study and described the setting and the procedures. It also provided an explanation of the data collection tools, provided samples of those tools, and described how they were used to collect relevant data. The techniques were analyzed in terms of their appropriateness in this environment and of how they answered the research questions below:

1. What types of motivation do Korean university students bring to the university EFL classroom?

2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?

3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?

This chapter presents the results of the background motivation questionnaire, the post-intervention questionnaires, and the questionnaire on critical thinking and its relationship with the English classroom. Additionally, it uses both descriptive and inferential statistical analyses to find connections in the data and to attempt to explain some of the results.
Motivation Background Questionnaire

The first data collection tool applied in this study, and the foundation upon which later analyses can take place, was the Motivation Background Questionnaire. This was designed to answer the first research question, What types of motivation do Korean university students bring to the university EFL classroom? The data shows that the motivation of the participants is most strongly influenced by their Ideal L2 Selves, followed by their L2 Learning Experiences, and least influenced by their Ought-to Selves.

Table 5 gives the Cronbach’s alpha, arithmetic mean, and standard deviation for each of the three categories in Dörnyei’s (2005) L2 Motivational-self System as it was applied to this research. The six survey values, strongly disagree, disagree, slightly disagree, partly agree, agree, and strongly agree were coded from 1 to 6 and entered into SPSS version 23, which was used to calculate the numbers. As can be seen, none of the three overall categories receives an alpha lower than .80, with the lowest, L2 Learning Experience, at .849 and containing twelve items. As far as subcategories go, the lowest is Intended Effort, which happens to be in the L2 Learning Experiences category but it received an alpha of .695 with four items. Therefore, all categories pass Dörnyei’s (2003) Cronbach’s alpha requirements for reliable data in both the sub-categories and categories in whole.
Table 5. Motivation Background Cronbach’s Alpha, Mean, and Standard Deviation

<table>
<thead>
<tr>
<th>Category</th>
<th>α</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal L2 Self</td>
<td>.877</td>
<td>4.502</td>
<td>.832</td>
<td>20</td>
</tr>
<tr>
<td>Ideal L2 Self</td>
<td>.917</td>
<td>4.465</td>
<td>1.296</td>
<td>5</td>
</tr>
<tr>
<td>Instrumentality-promotion</td>
<td>.776</td>
<td>4.285</td>
<td>1.090</td>
<td>5</td>
</tr>
<tr>
<td>Cultural interest</td>
<td>.782</td>
<td>4.559</td>
<td>.923</td>
<td>5</td>
</tr>
<tr>
<td>Traveling</td>
<td>.877</td>
<td>4.594</td>
<td>1.185</td>
<td>5</td>
</tr>
<tr>
<td>Ought-to Self</td>
<td>.903</td>
<td>3.275</td>
<td>1.047</td>
<td>15</td>
</tr>
<tr>
<td>Ought-to Self</td>
<td>.855</td>
<td>3.273</td>
<td>1.251</td>
<td>5</td>
</tr>
<tr>
<td>Instrumentality-prevention</td>
<td>.802</td>
<td>3.782</td>
<td>1.199</td>
<td>5</td>
</tr>
<tr>
<td>Parental expectations</td>
<td>.809</td>
<td>2.800</td>
<td>1.213</td>
<td>5</td>
</tr>
<tr>
<td>L2 Learning Experience</td>
<td>.849</td>
<td>4.228</td>
<td>.712</td>
<td>12</td>
</tr>
<tr>
<td>Attitude to L2 learning</td>
<td>.850</td>
<td>4.030</td>
<td>.994</td>
<td>4</td>
</tr>
<tr>
<td>Intended effort</td>
<td>.695</td>
<td>4.824</td>
<td>.722</td>
<td>4</td>
</tr>
<tr>
<td>Assessment of effort</td>
<td>.845</td>
<td>3.831</td>
<td>1.051</td>
<td>4</td>
</tr>
</tbody>
</table>

Likert scale data is ordinal in nature, that is, the coded numbers assigned to the responses only indicate an order, not a continuous spectrum from top to bottom. However, because of the category groupings inherent to this scale, the arithmetic mean can serve as measure of central tendency (Boone & Boone, 2012). Additionally, parametric analyses can be performed on real Likert data as opposed to Likert-type data (Boone & Boone, 2012; De Winter & Dodou, 2010).
Ideal L2 Self

The Ideal L2 self is the component of Dörnyei’s system which measures motivation relating to how an idealized version of one’s future self might employ a second language. With the Likert scale employed here ranging from 1, strongly disagree to 6, strongly agree, we see that the Ideal L2 Self category is highest, receiving an arithmetic mean score of 4.502, followed by 4.228 for L2 Learning Experience, and 3.275 for Ought-to Self. This suggests that the participants’ English learning motivation may be primarily influenced by a desire to become an idealized version of themselves (Dörnyei, 2009). Specifically, highest means were in traveling and cultural interest which could indicate that being able to live, travel, or work in a world where English is a necessary skill, is something that many see themselves doing at some point in their lives.

This potential interest in foreign culture and travel is supported by comments from the participants given at the end of the survey. One specifically mentioned work and stated, “In my case, I study English to get into college or use it as a tool to get a job but I want to work in a foreign company with foreigners and surrounded by foreign culture so it makes me want to study English more now.” Others simply expressed interest in travel or association with foreigners. One participant stated, “I like to talk to foreigners so I want to get more chances to communicate with them.” One even expressed negative feelings for the way English is taught in Korea due to its lack of focus on speaking and

\[2\] Some comments were translated from the original Korean while others, written in English, were edited for clarity and/or grammatical correctness. In all cases care was taken not to deviate from the original meaning.
interaction with native speakers, saying, “I hope to be more fluent. I think most Korean
students also want to be. But English education in Korea is too limited, especially related
to speaking, so I'd like to get more chances to meet native speakers which would be nice
not only for tests but I would also really enjoy it.”

Looking further at the subcategories of the Ideal L2 Self, it is seen that culture and
tavel were closely followed by general Ideal L2 Self motivation, which asks participants
to imagine themselves using English in future professional or personal situations.
Interestingly, Instrumentality Promotion had the lowest mean in the category, even
scoring below most sub-categories within the L2 Learning Experience. Described as
concrete, pragmatic events related to English learning (Taguchi, Magid, & Papi, 2009),
and including items relating to future success both personal and financial, these appear to
be less motivating than those factors related to the other sub-categories in the group.
However, a number of participants did make comments regarding the need to be good at
English in order to obtain jobs in good companies, which could also be construed as a
form of instrumentality promotion. For example, one participant stated that “English is
very important to get a good job.” And another pointed out that “I must learn English
because the documents and computer programs used in many jobs are made in the USA
or in Europe.”

L2 Learning Experience

The L2 Learning Experience, which concerns motivation related to among other
things, the classroom environment in which the learning takes place. It being the second
highest group in the survey suggests that participants’ learning experience somewhat
affects their motivation in relation to the other groups. That said, this section, by
definition, focuses on learners’ past experiences. This is to say, it is designed to report on students’ interests in the classes and experiences they have gone through previously—it does not represent an ideal language learning experience. The participants’ general attitude toward English learning ($\mu=4.030$) lies somewhat between the intended effort and assessment of effort ($\mu=4.824$ and $\mu=3.831$, respectively). The disparity between the latter two sub-categories could indicate that although the participants wish to expend effort on the study of English, they do not feel that they work as hard as they should.

Ironically, the relatively high scores for the L2 Learning Experience are somewhat contradicted by the participants’ comments about their studies. One participant admitted, “Korea’s English education is focused on grammar, vocabulary, and writing things, not pronunciation and speaking. But I still can’t use vocabulary and grammar exactly.” Another explained that “in Korea people study reading and listening by themselves but it’s really hard to study speaking and writing by themselves so people have different levels of English.” This may be explained by the fact that the university English courses the participants were currently enrolled in were taught by foreign native speakers rather than Korean speakers of English, whose classes they took as primary and secondary students. Additionally, some participants had traveled abroad and a few had studied English abroad. Therefore, they may have focused on these more recent experiences when filling out the questionnaire. One respondent seemed to indicate this when commenting, “I had been studying English for a year abroad and I can speak with my foreign friends even though I’m not fluent so I guess a foreign, native teachers’ style of teaching is good enough.”
Ought-to Self

The final group, the Ought-to Self ($\mu=3.275$), which involves the subject’s desire to avoid negative consequences brought on by not successfully attaining language goals, is interesting because much anecdotal evidence regarding standardized test-based curriculum, the necessity to compete in school, and a requirement for English test scores for jobs after university graduation might cause one to conclude that this would score much higher. In detail, instrumentality prevention ($\mu=3.782$) scored the highest in the group but was still lower than any other sub-category outside the group. General Ought-to Self items ($\mu=3.273$) not surprisingly scored similarly to the group overall but parental expectations scored lowest among all groups at ($\mu=2.800$).

This was interesting as it has been shown that in Korea, parents have a very strong influence on the English education of school children (Choi, 2008). Perhaps this is due to the fact that university entrance is viewed as a crucial step (Eun, 2001) and that once a student is admitted, a parent exerts less pressure. This finding is not unique, however. In their study examining the motivational background of English learners in China, You and Dörnyei (2014) found that parental expectations were not a significant factor for most students unless a student’s major field of study was English, in which case parental expectation increased dramatically. None of the students in this study were English majors. Likewise, there were no mentions of parents in any of the post-questionnaire comments.

Inferential Analysis

In a correlational analysis of the three types of motivation made using Pearson’s $r$ in SPSS, a correlation can be found between the Ideal L2 Self and the L2 Learning
Environment but not the Ought-to Self. This is illustrated in Table 6. Similarly, when the Ideal L2 Self was converted to a nominal agree or disagree scale by considering responses with means of four or more to be in agreement and those with means of three or less to be in disagreement, and it was compared against the other categories using a Mann-Whitney U test, a correlation between it and the L2 Learning Environment was found (p=.004) but not between it and the Ought-to Self.

This correlation was found to be interesting, but direct conclusions have yet to be drawn from it. It may be that having foreign native-speaking teachers helps students better identify communicative functions necessary to satisfy the needs of their Ideal L2 Self and that this variable might therefore affect both their learning environment and their reasons for studying. There was no indication of this in the post-questionnaire comments and further research will be necessary before any solid conclusions can be drawn from this data.

Table 6. Correlations Between the Branches of the L2 Motivational Self System

<table>
<thead>
<tr>
<th></th>
<th>Ideal L2 Self</th>
<th>Ought-to Self</th>
<th>L2 Learning Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal L2 Self</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.075</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.685</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Ought-to Self</td>
<td>Pearson Correlation</td>
<td>.075</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.685</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>L2 Learning Environment</td>
<td>Pearson Correlation</td>
<td>.646**</td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.125</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: ** Correlation is significant at the 0.01 level (2-tailed).
Post-intervention Questionnaires

Questionnaire results pertaining to the participants’ general feelings about the lesson and activities taught are presented below in Table 7 and Table 8. The data collection tool was created to answer the second research question, How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus? and was analyzed both quantitatively and qualitatively in order to do so.

Both being considered Likert surveys, the data was placed into SPSS version 23 and analyzed for reliability in the same way the background motivation survey was. Results showed a strong correlation with alphas of .900 and .917, which according to Dörnyei (2003), indicates that the items were testing similar traits. The means for days one and two were 4.497 and 4.772 respectively. These results show a strong tendency for the participants to have thought the lessons favorable though direct comparisons between the two are inconclusive.

For one, the numbers are too similar to indicate significant differences. Secondly, though both lessons were designed to stimulate critical thinking, and the types of critical thinking were categorized and identified, there is no quantifiable way of determining which lesson contained more critical thinking. Additionally, any number of other factors might have influenced the results. For instance, in the process of preparing for the research, the researcher could have simply spent more time focusing on student needs therefore providing a class that was more helpful. Or, the researcher may have had more passion or energy in the classroom due to the fact that the research was meaningful and important to him, thereby providing some other aspect that the participants, used to
another instructor, might have seen as a break from the usual format. Another case could be that the participants were simply trying to please the researcher for one reason or another.

It can tentatively be said, however, that the results do indicate that participants had a favorable view of each lesson. Comments from the participants support this theory. A full list of comments can be seen in Appendix F. Positive comments indicating that the class was “fun,” “funny,” “good,” “interesting,” “exciting,” “wonderful,” or “happy.” made up a majority of the comments. Though the grammar instruction made up a relatively small component of the lesson, a number of students did comment on this indicating that it was either “well organized” or generally unnecessary. Additionally, a number of students indicated the importance of speaking in the activities, something, as discussed in the motivation background questionnaire analysis, that might be a change for some students. More than one student mentioned that they would have gotten more out of it if they had spoken more but hesitated because of lack of confidence. For example, “I become shy easily so I didn’t participate enough, but if someone who took part in this class spoke, he or she would be good.”
Table 7. Post-intervention Questionnaire – Day 1

<table>
<thead>
<tr>
<th>Category</th>
<th>α</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Feelings About the Lessons</td>
<td>.900</td>
<td>4.497</td>
<td>.954</td>
<td>5</td>
</tr>
<tr>
<td>• Today’s activities were useful to improving my English.</td>
<td></td>
<td>4.394</td>
<td>1.071</td>
<td>26</td>
</tr>
<tr>
<td>• The activities were interesting.</td>
<td></td>
<td>4.636</td>
<td>1.123</td>
<td>26</td>
</tr>
<tr>
<td>• The activities helped me speak English better.</td>
<td></td>
<td>4.515</td>
<td>1.104</td>
<td>26</td>
</tr>
<tr>
<td>• I worked hard during the activities.</td>
<td></td>
<td>4.485</td>
<td>1.104</td>
<td>26</td>
</tr>
<tr>
<td>• I would like to participate in activities similar to these in the future.</td>
<td></td>
<td>4.455</td>
<td>1.157</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 8. Post-intervention Questionnaire – Day 2

<table>
<thead>
<tr>
<th>Category</th>
<th>α</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Feelings About the Lessons</td>
<td>.917</td>
<td>4.772</td>
<td>.900</td>
<td>5</td>
</tr>
<tr>
<td>• Today’s activities were useful to improving my English.</td>
<td></td>
<td>4.722</td>
<td>1.07</td>
<td>26</td>
</tr>
<tr>
<td>• The activities were interesting.</td>
<td></td>
<td>4.889</td>
<td>1.021</td>
<td>26</td>
</tr>
<tr>
<td>• The activities helped me speak English better.</td>
<td></td>
<td>4.694</td>
<td>1.023</td>
<td>26</td>
</tr>
<tr>
<td>• I worked hard during the activities.</td>
<td></td>
<td>4.806</td>
<td>0.907</td>
<td>26</td>
</tr>
<tr>
<td>• I would like to participate in activities similar to these in the future.</td>
<td></td>
<td>4.75</td>
<td>1.09</td>
<td>26</td>
</tr>
</tbody>
</table>

Tables 9 and 10 give the results of the questionnaires soliciting information regarding possible outside influences on behavior during class. The data was collected to add depth to analysis that might have resulted from anomalies in the two tables above.
The data itself was simply Likert-type data, and therefore mean and standard deviation may not be a very informative means of analysis (Boone & Boone, 2012) so instead of reporting it in categories, only the mean and standard deviation for each individual item is given.

Interestingly, influence of the classroom environment seemed to have the greatest impact on the participants. One even commented after the first day’s activities, “The desk arrangement interfered with my focus on the class.” Unfortunately, the wording in the item fails to indicate whether the effect was of a positive or negative nature. However, the response above shows that for at least that one participant, it was a negative influence. The desks, incidentally, were single desks with attached chairs arranged in square groups of four so that most activities could be conducted in groups of that size. This could well be unnatural for a student who is used to a front facing row of desks in a more traditional lecture-based course. Other data seems to be inconclusive and little illumination can be had from individual, post-questionnaire comments.
Table 9. Possible Outside Influences on Behavior During Class – Day 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The classroom environment (e.g. the table arrangements, group size, partners) affected my participation in class.</td>
<td>4.303</td>
<td>1.218</td>
<td>33</td>
</tr>
<tr>
<td>• I was confused about how to participate in the activities.</td>
<td>2.606</td>
<td>1.575</td>
<td>33</td>
</tr>
<tr>
<td>• I was nervous about taking part in the activities.</td>
<td>2.879</td>
<td>1.513</td>
<td>33</td>
</tr>
<tr>
<td>• I was distracted during the activities.</td>
<td>2.576</td>
<td>1.207</td>
<td>33</td>
</tr>
<tr>
<td>• The activities were too easy.</td>
<td>3.818</td>
<td>1.242</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 10. Possible Outside Influences on Behavior During Class – Day 2

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The classroom environment (e.g. the table arrangements, group size, partners) affected my participation in class.</td>
<td>4.429</td>
<td>1.294</td>
<td>36</td>
</tr>
<tr>
<td>• I was confused about how to participate in the activities.</td>
<td>2.389</td>
<td>1.231</td>
<td>36</td>
</tr>
<tr>
<td>• I was nervous about taking part in the activities.</td>
<td>2.528</td>
<td>1.323</td>
<td>36</td>
</tr>
<tr>
<td>• I was distracted during the activities.</td>
<td>2.333</td>
<td>1.179</td>
<td>36</td>
</tr>
<tr>
<td>• The activities were too easy.</td>
<td>3.472</td>
<td>1.258</td>
<td>36</td>
</tr>
</tbody>
</table>

Follow-up Critical Thinking Questionnaire

To answer the third research question, Do learners find the use of critical thinking to be advantageous to the study of English? the follow-up critical thinking questionnaire was used. As mentioned in the previous chapter, it is designed to collect data on participants’ tendency towards critical thinking related behaviors and was split into two
parts so that responses to the first part, consisting of items that the researcher considered to be directly related to critical thinking focused learning behaviors, would not be influenced by a working definition of critical thinking preceding the second part, which asks about explicitly defined critical thinking learning. Due to this separation, and the fact that the surveys were completed online, there were a few cases in which the first survey was completed but not the second or vice versa. Because the analysis software SPSS cannot handle incomplete data sets and because such gaps would make comparisons impossible anyway, those surveys were removed from the list. Unfortunately, they comprised 16% (five of 31 total) of the responses which may have some negative influence on the conclusions drawn from the data.

When all data were initially entered into SPSS and Cronbach’s alpha analysis completed, the results were shown to be unreliable. In order to obtain proper reliability coefficients in this data, and in doing so, have the results be a proper representation of a Likert scale, certain other unreliable data had to be first removed (Dörnyei 2003). Three items had to be reverse coded to account for negative wording in the original questions. This was done by subtracting each coded response by seven manually and then double-checking the results. Once this was done, one of these items still did not correlate well with the others. Dörnyei (2007) suggests that correlations between .3 and .5 are meaningful and correlations above .6 are very strong. Using SPSS version 23, the item, “Students should listen and absorb what a teacher says in English class.” showed a corrected item-total correlation of -.467. This anomaly was potentially due to any number of factors including poor wording on the part of the author, or a misunderstanding of either the original wording or the translation on the part of the participant. Alternatively,
the item could be a poor measure of critical thinking, or possibly there was a cultural or personal difference between the researcher and the participants so that this behavior was seen as contrary to critical thinking and active learning to the former but a natural part of any classroom to the former independent of whether or not critical thinking is actually being utilized. In any case, this item was removed.

Additionally, due to an error in editing after the survey was returned from the translator, one item on the second part of the survey was inadvertently deleted and replaced by a duplicate from the first part of the survey. Furthermore, responses to the identical items were similar but not identical; response means were 2.769 and 2.808 with standard deviations of 1.423 and 1.470 respectively. When subjected to a Cronbach’s alpha test, these two items alone reported .900.

The solution was not to average the results because that created non-whole numbers which would be incompatible with the analysis software. Of the three possible solutions, throwing out both items, throwing out a single item, or keeping both; throwing them both out was the eventual solution because removing one would have been arbitrary and keeping both would have skewed the results in favor of that item. It was subsequently found that they actually had low correlation coefficients compared to the other items in the group anyway confirming the decision to remove them both. The remaining six items on the first part of the survey gave a Cronbach’s alpha of .751, an arithmetic mean of 4.833, and a standard deviation of .804 and had correlations of .694, .558, .782, .311, .399, and .375 indicating some meaningful correlation between the items and therefore some reliability within the questionnaire but less than in the previous questionnaires.
As explained in Chapter Three, the second part of the questionnaire included an explanation of the research and simplified working definition of critical thinking in both English and Korean which was:

The purpose of this research is to see how students feel about critical thinking in their English classroom. For the purpose of this research, critical thinking could be described as thinking using careful reasoning to come up with ideas. Also, people who think critically understand that they are not perfect and therefore they try to evaluate and improve their ideas if possible. The following questions are related to this.

Then the participants were asked to rate the statements on a 6-point Likert scale as in the previous section. The three remaining items on this part of the survey were all deemed to be within parameters and therefore in no need of modification. Cronbach’s alpha, mean, and standard deviation for each part can be seen in Table 11.

Table 11. Follow-up Critical Thinking Cronbach’s Alpha, Mean, and Standard Deviation

<table>
<thead>
<tr>
<th>Category</th>
<th>α</th>
<th>Mean</th>
<th>std. dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response to critical thinking focused learning behaviors</td>
<td>.751</td>
<td>4.833</td>
<td>.804</td>
<td>6</td>
</tr>
<tr>
<td>Response to explicitly defined critical thinking learning</td>
<td>.841</td>
<td>4.513</td>
<td>.901</td>
<td>3</td>
</tr>
</tbody>
</table>

As can also be seen in Table 11, responses to both parts of the questionnaire were generally positive. A breakdown of responses to each part can be seen in Tables 13 and 14.
Table 12. Percentage of Negative Responses to Critical Thinking Behavior Items

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of respondents who disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers should encourage students to discuss thoughts and give opinions in English class.</td>
<td>7.69%</td>
</tr>
<tr>
<td>It's OK to disagree with other people's opinions during English class.</td>
<td>23.08%</td>
</tr>
<tr>
<td>English class is a good place to compare Korean culture with other cultures.</td>
<td>19.23%</td>
</tr>
<tr>
<td>Trying to explain something in English rather than switching to Korean is important, even when it's difficult.</td>
<td>3.85%</td>
</tr>
<tr>
<td>Trying to figure out unknown words using context is a better way to learn them than to use the dictionary.</td>
<td>7.69%</td>
</tr>
<tr>
<td>When I don't understand something my teacher says, it's important to ask him or her rather than asking for another student to explain later in Korean.</td>
<td>26.92%</td>
</tr>
</tbody>
</table>

Table 13. Percentage of Negative Responses to Defined Critical Thinking Learning Items

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of respondents who disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using critical thinking in the English classroom helps me to learn English.</td>
<td>19.23%</td>
</tr>
<tr>
<td>Classrooms that employ critical thinking are more fun and interesting.</td>
<td>11.54%</td>
</tr>
<tr>
<td>When I use critical thinking in the English classroom I am more motivated to study, learn, and or speak English.</td>
<td>15.39%</td>
</tr>
</tbody>
</table>

Furthermore, it can be noted that only one of the 26 participants on the first part of the survey rated the critical thinking behaviors as negative in regard to English learning if negative is interpreted as having a mean of all responses in a category less than or equal
to three. And only three of 26 participants responded negatively to the defined critical thinking learning items if this is defined likewise.

Despite this, some variability between questions can be seen. And when positive and negative responses on the two parts of the questionnaire were compared using McNemar’s test in SPSS, it was determined that there was no correlation between responses in the respective questionnaire parts (p=.625). Table 14 illustrates this data.

Table 14. Follow-up Critical Thinking Responses

<table>
<thead>
<tr>
<th>Response to critical thinking classroom behaviors</th>
<th>Response to critical thinking as defined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
</tr>
<tr>
<td>positive</td>
<td>22</td>
</tr>
<tr>
<td>negative</td>
<td>1</td>
</tr>
<tr>
<td>total</td>
<td>23</td>
</tr>
</tbody>
</table>

This data indicates that although critical thinking behaviors may be seen as positive on the whole, there may be inconsistencies between students regarding the potential outcomes, beneficial or not, of each of the specific behaviors, and that individual students may or may not see each of the behaviors as related in any way. When asked to respond to the statement “Using critical thinking in the English classroom helps me to learn English,” a few students disagreed. For example, one student responded, “I think it is the other way.” and another “My ability to speak what I think in English was limited.” However, the majority of responses were positive. A full list of responses can be found in Appendix F.
Multiple responses indicated that critical thinking made the students more willing or able to speak in class, potentially helping them with perceived fluency. “Critical thinking makes us express ourselves.” “It has a lot of chance to discuss with others.” I could talk more.” “I speak more with critical thinking.” Others indicated that critical thinking somehow makes it more easy to retain information. “It is more memorable and effective.” Still others indicated an increase in active learning behaviors. “It helps to think more.” “If I use critical thinking in English, it activates my brain to learn.” “It helps to develop students’ abilities to think in English.” “It makes students to be more active speakers because we want to express our opinions better and more.” These included error identification strategies. “If I use critical thinking, it’s easier to find wrong things.”

When asked to respond to the statement, “Classrooms that employ critical thinking are more fun and interesting.” again, most participants were very positive mentioning simply that it is, in fact, more fun. “It is fun.” “Just fun, not boring.” “It is interesting for sure.” “It depends on the subject but it is fun most of the time.” Others cited additional interaction as being the reason for a more interesting class. “It is good to understand that other people have different ideas.” It gives me the chance to think about how different my opinion could be from those of others.” “It is interesting to listen to others.”

However, some respondents did not agree completely. For example, “It made us talk a lot more so it was good, but I worried a little bit that I would hurt other people’s feelings when I said, ‘no’.” And another stated, “It is difficult to speak my critical thinking in English.” presumably indicating that the increased effort was not enjoyable.

Finally, when asked to respond to the statement, “When I use critical thinking in the English classroom I am more motivated to study, learn, and or speak English.” the
majority of responses were again positive, many having to do with the active learning behaviors mentioned previously. For example, “Because it makes us think more (use brain more).” “Because I have to explain the reason why I thought like this.” “It makes me feel more interested in English studying through the activities with critical thinking, and makes me try harder to use English.” “It makes me more active English speaker because I want to speak out my opinion.” “I am not passive.” “It derives more active participation from students in the class.” Also, it seems that some found the practice more realistic and useful. “It is good to use English in speaking out our real thinking in this class than the class which asks us to speak what we just learned from textbook.” “It is especially important for preparing for interviews in English.”

However, there were again a few negative responses. For instance, “I don’t know why we have to do critical thinking when studying English.” “I wish my English were good enough to speak my critical opinions.”

These results were somewhat unexpected to the researcher. Anecdotal evidence and conversations between the researcher and colleagues lead to a general, though admittedly unscientific, opinion that critical thinking was generally not something valued in the Korean EFL classroom. This was supported by some of the research in the literature review of this paper, yet the numbers collected here dispute that notion. It was theorized that critical thinking was indeed a helpful strategy to be employed in the classroom but that the learners might not recognize this so easily. This is something that should be further explored.

However, there are some caveats that may reduce the impact of the result. For one, the errors in the editing and administration of the questionnaire, and the difficulties with
reliability detailed above may have invalidated the results to some extent. Furthermore, though the exact nature of the study was not disclosed to the participants in full detail until the end of the study, they were made aware of some aspects of the research and their responses could have reflected a bias toward a point of view they interpreted as positive. In other words, they may have assumed that behaviors involving critical thinking were desirable to the researcher and tended toward responses indicating this. Nonetheless, these results should be interpreted as tending toward a positive view of critical thinking and critical thinking focused learning behaviors, at least among the participants of this study.

Summary

This chapter presented the results of background motivation questionnaire, the post-intervention questionnaires, and the follow-up critical thinking questionnaire and its relationship with the English classroom. Additionally, it used both descriptive and inferential statistical analyses to find connections in the data and to attempt to explain some of the results.

Chapter Five reviews the research questions and reports the major findings of the study. It then discusses limitations and implications of the research and suggests areas for further research. Finally, the author concludes with an examination of what he has learned through the capstone writing process.
CHAPTER FIVE

Conclusions

Chapter Four reported on the results of the data collection tools and used both descriptive and inferential statistical analyses to find connections in the data and to attempt to explain some of the results. This chapter reviews the results of the research and discusses them in terms of the research questions posed. Then, it addresses limitations of the research and potential implications for stakeholders along with ways to share this information and suggestions for future research are proposed. Finally, the author concludes by describing what he has gained, both personally and professionally from the capstone writing experience.

Guiding Research Questions

This paper attempted to examine the following questions relating to the Korean university EFL environment and critical thinking:

1. What types of motivation do Korean university students bring to the university EFL classroom?
2. How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus?
3. In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English?
Findings

Research Question One

In addressing the first research question, What types of motivation do Korean university students bring to the university EFL classroom? this study attempted to determine generally what aspects the students’ lives influence their English learning motivation. These could be personal, professional, experiential, or aspirational, among others. As seen in the literature review, motivation is a complex and often difficult-to-observe phenomenon, so in order to gain a clearer picture, Dörnyei’s L2 Motivational Self System was adopted as the basis for the background motivation questionnaire. The results of this questionnaire showed some unexpected patterns, discussed below, which may not directly point to any connection between motivation and critical thinking. In a general way, however, they reinforce the complexity of a language learner’s motivation as discussed by Williams and Burden (as cited in Dörnyei & Ushioda, 2011), Dörnyei and Ushioda (2011) and Lim (2002). It also indicates that educators need to pay attention to their students’ needs in order to properly address this complexity—something which a focus on critical thinking may inherently do.

As discussed in the previous chapter, the Ideal L2 Self represented the largest contribution to the participants’ motivational profile. More specifically, within this category, integrative-type motivation including cultural interest and travel showed the highest levels of influence overall. This may be a reflection of Yashima’s (2002) international posture or of Lamb’s (2004) finding that globalization was a major reason why students desire to study English. The Ought-to Self, on the other hand, represented the smallest contribution to the participants’ motivational profile with parental
expectations showing the smallest influence. This was somewhat surprising, given the amount of pressure students received from parents and teachers regarding their abilities in English, particularly when it comes to standardized test performance, though it does correspond to You and Dörnyei’s (2014) findings in China. L2 Learning Experience was indicated to be the second most influential type of motivation, with intended effort shown to be the highest subcategory before both attitude toward L2 learning and students’ assessment of their own effort.

These results, whether surprising or expected, indicate a somewhat complex relationship students have with their English education. This complexity, though, should not be surprising due to the fact that English language students in Korea do experience so much pressure from home, school, and work to learn English. This, combined with the near inescapable presence of English language pop culture from around the world, and the desire for many young Koreans to travel, study, or work abroad make the English language something that is simply unavoidable to most all Korean students.

If this complexity is fully taken into account during the design of English language courses and curricula, these results indicate that students should be involved, to some extent, in what goes on in the classroom. Interpreted aggressively, this concept could entail student involvement in the planning and coordinating of course objectives, lesson topics, and class materials. However, this approach could be limiting or impractical in many situations. Encouraging student critical thinking in the classroom, though, is something that could be incorporated into almost any situation and could potentially have the same motivating effect by giving students a chance to express their own thoughts and
ideas so that they could take a small measure of control over their English classroom experience.

**Research Question Two**

In addressing the second research question, How do Korean university students respond, in terms of interest and motivation, to a two-day teaching intervention with a critical thinking focus? This study has attempted to discover whether or not there is a connection between the two concepts of critical thinking and motivation in the hopes that ultimately, methodologies and lessons can be designed to maximize the learning potential for the students. Providing a direct answer to this question is beyond the scope of this study, but the data seem to indicate a positive correlation between the two, though difficulties in measuring motivation levels and statistically measuring critical thinking usage makes it impossible to quantify.

Critical thinking itself can be measured in multiple ways as shown in the rubrics included in the literature review. This study, however, chose not to analyze participant responses to evaluate critical thinking, nor were they asked directly whether or not critical thinking had been utilized during any intervention activities. Instead, the intervention lessons were designed in such a way that, from the researcher’s point of view, critical thinking would be required in order to complete them. Therefore, if it is assumed that this was indeed correct, students who fully participated in the activities did employ critical thinking to one extent or another.

Additionally, responses to the questionnaire items regarding interest in the intervention lessons were also generally positive. Whether or not there was a causal relationship between motivation and critical thinking cannot be determined in the scope
of the data collected, but it can be reasonably said that there were favorable responses to both interventions, and that comments provided evidence to indicate some sort of connection between motivation and critical thinking.

**Research Question Three**

In addressing the final research question, In regard to the questions above, do learners find the use of critical thinking to be advantageous to the study of English? this study attempted to analyze not only whether the participants experienced high levels of motivation in relation to critical thinking, but also whether or not critical thinking is seen to be advantageous in the study of English in particular.

Responses to the final Likert questionnaires concerning critical thinking specifically in the English classroom showed that the participants had a generally favorable response to the two intervention lessons developed with critical thinking in mind, and to the notion of English classes employing critical thinking in general. To better understand the reasons for this, however, it is necessary to look to the comments obtained at the end of the questionnaires. Though there seemed to be no real consensus as to why, the majority of the participants did seem to agree that critical thinking was useful to the study of English.

The participants gave numerous reasons why they felt this way, ranging from a more fun classroom environment, to the opportunity to express themselves more freely, to the simple reality that a focus on critical thinking at its most fundamental level requires, simply by the nature of the exercise itself, that a student practice speaking or otherwise communicating in order to complete the tasks. This final reason is something
that students in many Korean English classrooms have presumably not had sufficient experience with.

**Limitations of This Study**

The study, though generally showing participants’ favorability toward including critical thinking in university English classrooms in Korea, does have a number of limitations that restrict generalizability, pose potential validity concerns, and fail to address some of the questions to the extent that was hoped by the researcher.

Regarding generalizability, the study itself was rather small. This, coupled with the fact that the researcher identified context as a specific reason that the research questions needed to be asked, makes it very difficult to generalize the results beyond the classroom in which it took place, or at most, beyond situations in which the makeup of the students, the goals of the course, and the educational environments are extremely similar. Even then, the results should be seen only as one potential finding on which to base further research rather than as a guide for how instructors should proceed with their instructional planning.

Furthermore, there are a number of factors in the research design that bring up validity concerns. Though far from invalidating the entire study, they are more than trivial and should be mentioned. First, a number of definitions that were relied upon to conduct the research, for instance, the definition of critical thinking, were somewhat broad and could be interpreted in more than one way. In the literature review, it was noted that there was a lack of similar studies connecting critical thinking with motivation. In retrospect, the reason for this lack may be due to the abstractness of the concept of critical thinking. By defining critical thinking and presenting rubrics to assess its
presence, this study attempted to bring some concreteness to the concept but a certain amount of abstract interpretation remains.

Additionally, the questionnaires, too, had a certain level of variability to them. For instance, when questions about L2 Learning Experiences were decided upon, learning background was not taken into account. Many participants may have experienced the English learning environment described in the literature review but some may have also had native-speaking teachers who used different teaching methods, and others may have even studied English abroad. These differences were not taken into account. The discrepancy between instrumentality promotion scores and comments from participants too, introduces some validity questions. As noted in the literature review, instrumentality promotion was the lowest of the subcategories within the ideal L2 self yet some of the participant comments noted getting good jobs and doing well in those jobs as motivation for studying English. This could be simply an anomaly but it could also be due to a poor selection of questions on the part of the researcher. Instead, more specific questions about attaining employment might have elucidated the item.

Finally, assumptions made by the researcher could have led to conclusions not being quite as clear as they seemed. Assumptions of respondent intent are one example. Because most of the comments were written and not followed up on by the researcher, some interpretation had to be made whereas interviews could possibly have been conducted to more clearly understand the participants’ answers. For example, a comment calling the lesson “active” could be interpreted as either interesting, having forced the use of language, both, or something else entirely. There were not too many of these cases but further interrogation with the participants may have proven valuable.
Assumptions also played a role in both the design of the experiment and the interpretation of the results. Firstly, as mentioned previously, the intervention was designed with the assumption that critical thinking would be necessary to complete the tasks, and rubrics indicating this were given as examples. However, no rubric was applied to the intervention classes themselves so no verification of this was built into the study. It is possible that the participants were able to complete the exercises with little to no amount of critical thinking as defined in this study. Additionally, it was assumed that participants were honest in their responses. If the participants, knowing that despite the anonymity, the researcher would review the results, had tried to give responses desirable to the researcher, they may have skewed their responses. This type of bias was not accounted for in this study.

Lastly, the statistical analyses used in the study potentially pose problems in interpretation. In terms of descriptive statistics, much of the analysis relied on arithmetic means and standard deviations within the subcategories of the Likert questionnaires which, as mentioned in the methods chapter, can be slightly problematic when dealing with ordinal data.

**Implications for Stakeholders**

Despite the overall lack of generalizability inherent in this study, the implications for stakeholders involve learning outcomes for students, and curriculum development and classroom methodology for teachers and administrators alike. Most notably, student motivation is not likely something that should be taken for granted. Instead, it should be seen as important for the sake of the learners, and instructors may have better results if they try to better understand where the motivation comes from.
The major implication of this study for students is related to their interest in language study. If the results of this or further studies on critical thinking in the language classroom can be replicated, rather than means to an end which can leave many students uninterested or even bitter with their language study, the English classroom can be a place where students are allowed to express their own thoughts and ideas and challenge assumptions and points of view. In this kind of environment, students could potentially foster an interest in language learning of their own, which could create additional motivation and improve proficiency.

One way of doing this would be to try to include critical thinking skills in all or most lessons. This is already being done in language learning in the Common European Framework of Reference for Languages and for general classroom learning in the Common Core. Using Facione’s (1990) Consensus List of Critical Thinking Cognitive Skills and Sub-skills could be an easy way to highlight critical thinking opportunities in lessons which have already been implemented.

For educators, administrators and other policymakers, the results indicate that in some cases a reevaluation of curriculum and methodologies may be in order. If motivation can be increased through lessons which incorporate critical thinking, a response should be explored. As seen in the post-intervention data, students respond positively when they have an opportunity to express their thoughts and ideas in the classrooms and therefore it may be beneficial to better understand learners and to create environments in which they are allowed to do so. If this means rewriting the curriculum, that is something that should be explored.
In terms of finding out more about what motivates students, teachers need to be listening to their students. Spending a small amount of time talking to students about what interests them or why they want to study English could be very helpful. Even giving assignments or conducting exercises in class during which students discuss their likes and interests may give insight into how teachers can better relate to students on a personal level.

**Suggestions for Further Research**

Related to both the limitations of this study and implications to stakeholders, several further research areas should be explored. Firstly, additional research on the background motivation of Korean students would be useful. Discovering more clearly what motives Korean students to learn English would be valuable when such a large percentage of their education is dedicated to it. Second, further research into critical thinking in the Korean language classroom is necessary. It could take the form of critical thinking-based lessons, examples of which were used in this study, or as more research into active or autonomous learning, both of which employ critical thinking and are generally not common in Korean English-language classrooms.

**Conclusions**

Throughout the endeavor of this capstone, I have asked myself what a program with no capstone or thesis requirement would be like. From my understanding speaking with those who have gone through such programs, they generally require another course or two in a specialty of interest to make up for the missing credits. I can see many benefits of this type of program, not the least of which would be a clearer, more prescribed degree path to follow.
That said, being in the final leg of the capstone completion track as I am now, I am
glad that I did choose to complete my degree in this way. Despite the large number of
hours spent on this capstone, I do think that I learned far more than I would have had I
simply registered for another semester’s worth of classes. I have learned more about my
capstone topic than I would have otherwise, of course, but I have also learned more about
writing, conducting research and reading about others’ research than I ever would have
simply by taking another course or two. I have also learned more about problem solving
and the concept of active research, that is, looking for things in my teaching environment
that are not ideal and trying to discover ways to fix them.

I originally chose this capstone research area after a discussion with a colleague.
We had been discussing our students relative lack of interest in the required freshman
classes at our school. My colleague suggested that it was due to the students being burned
out from the intense English language studies needed to compete on the national college
entrance exam but I argued that the real reason was we were not really giving our
students anything of interest to talk about.

Eventually we came to the nature of critical thinking in a language classroom and it
was my assertion that natural language use was inseparable from critical thinking, in
which case it was our duty to incorporate this into our lessons so that we could encourage
students to make the English language their own. Doing so, in my opinion, would give
them the motivation to learn more. This colleague did not necessarily disagree, but
argued that a more proper approach, especially when working with Korean students, was
to give students the lexical and grammatical knowledge first so that they would be able to
apply it outside the classroom where they would naturally find more motivating scenarios in which to use it.

Upon completion of my capstone, I am more convinced than ever that the argument for more critical thinking in the classroom, though not very grounded in fact or even relevant theories initially, deserves more focus. Through the literature I read, and the research I conducted, I feel more strongly now than before that we, as language teachers, need to provide our students with a platform on which they can freely use English to communicate their thoughts and ideas, and I think inspiring critical thinking can do this. Though I was not able to study whether this approach will have any lasting effects on the students’ learning, it is clear to me that the students do enjoy a classroom in which they can express themselves, and that is a wholly worthwhile outcome in its own right.

At this point, I have no idea if I will continue my studies formally by pursuing a doctorate or if I did, if I would decide to focus on a similar research interest, but in the meantime, I do intend to keep teaching and knowing what I now know will help me to do this better than before in terms of both my classroom and in helping to improve the curriculum at my school.

In essence, I began this capstone because it was a requirement for my degree and I chose my topic because it was something I was interested as a teacher. I did not make any profound discoveries or prove any general theories involving language acquisition but I did learn a lot about the topic and hope that I can share my findings with others and that I can make a positive contribution to the English education at my school and elsewhere.

Ultimately, I think that is what the capstone should be and I am pleased to have written one myself.
REFERENCES


doi:10.1093/applin/amu046

APPENDIX A: Motivation Background Questionnaire
The Ideal L2 Self

- I can imagine myself speaking English in the future with foreign friends at a café or bar.
- I can imagine myself in the future giving an English speech successfully to the public in the future.
- I can imagine a situation where I am doing business with foreigners by speaking English.
- I can imagine myself living abroad and having a discussion in English with the locals.
- I can imagine myself studying in a university where all of my courses are taught in English.

Instrumentality-promotion

- Studying English is important to me in order to gain the approval of my peers.
- Studying English is important to me because other people will respect me more if I have a knowledge of English.
- Studying English is important to me in order to achieve a personally important goal (e.g. to get a degree).
- Studying English is important to me because it will help me get a better job and/or make more money.
- Studying English is important to me because an educated person is supposed to be able to speak English.

Cultural Interest

- I like English movies.
- I think learning English is important in order to learn more about the culture and art of English-speaking countries.
- I like TV programs made in English-speaking countries.
- I really like the music of English-speaking countries (e.g., pop music).
- I like English-language magazines, newspapers, and books.

Traveling

- Learning English is important to me because I would like to travel internationally.
- I like to travel to English-speaking countries.
- I study English because with English I can enjoy travelling abroad.
- Learning English is important to me because I plan to travel to English-speaking countries in the future.
- Studying English is important to me because I am planning to study abroad.
The Ought-to L2 Self

- Studying English is important because educated people are supposed to speak it.
- I study English because close friends of mine think it is important.
- Studying English is important to me in order to gain the approval of my family.
- Studying English is important to me in order to gain the approval of my teachers.
- I consider learning English important because the people I respect think that I should do it.

Instrumentality-prevention

- Studying English is important to me, because I would feel ashamed if I got bad grades in English.
- I have to learn English because I can't graduate without it.
- Studying English is necessary for me because I don’t want to get a poor score in English proficiency tests (TOEIC, TOEFL, TEPS, IELTS, etc.).
- I worry about what will happen if I don’t speak English well in the future.
- I have to learn English because I don’t want to fail my English courses.

Parental Expectations

- My parents/family believe that I must study English to be an educated person.
- I have to study English, because, otherwise, I think my parents will be disappointed with me.
- I can feel a lot of pressure from my parents when I’m learning English.
- My image of how I want to use English in the future is mainly influenced by my parents.
- My dreams of how I want to use English in the future are the same as those of my parents'.
L2 Learning Experience

Attitudes to L2 Learning

- I always look forward to English classes.
- I really like the actual process of learning English.
- I find learning English really interesting.
- I really enjoy learning English.

Intended Effort

- I am prepared to expend a lot of effort in learning English.
- Even if I failed in my English learning, I would still study English very hard.
- English would be still important to me in the future even if I failed in my English course.
- I would like to spend lots of time studying English.

Current Assessment of Effort

- I am working hard at learning English.
- I think I am doing my best at learning English.
- Compared to my classmates, I think I study English relatively hard.
- If my teacher gives me optional assignments, I do them.
APPENDIX B: Intervention One Lesson Plan
<table>
<thead>
<tr>
<th>Course: English Expressions 2</th>
<th>Length: 50 mins x2</th>
<th>Class: 1</th>
<th>Topic: Expressing feelings</th>
</tr>
</thead>
</table>

**Grammar**

- Use *if* and *when* and appropriate tenses to talk about real conditional events.
- Use plurals and simple tenses to talk about regular things.
- Use cause and effect clauses.

**Communication**

- sharing feelings
- talking about good and bad news
- inferring feelings
- identifying reasons
- discussing superstitions

**Critical Thinking**

<table>
<thead>
<tr>
<th>interpretation</th>
<th>decoding meaning</th>
<th>categoryization</th>
</tr>
</thead>
<tbody>
<tr>
<td>analysis</td>
<td>examining ideas</td>
<td>identifying arguments</td>
</tr>
<tr>
<td>evaluation</td>
<td>assessing claims</td>
<td>analyzing arguments</td>
</tr>
</tbody>
</table>

**Vocabulary**

- words to describe feelings
- participial adjectives
- depressed(ing)
- excited(ing)
- disappointed(ing)
- disappointed(ing)
- relaxed(ing)
- delighted(ing)
- satisfied(ing)
- surprised(ing)
- ashamed/shameful
- exhausted(ing)
- frustrated(ing)
- relaxed(ing)
- annoyed(ing)
- confused(ing)
- angry

<table>
<thead>
<tr>
<th>inference</th>
<th>querying evidence</th>
<th>conjuring alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>explanation</td>
<td>stating results</td>
<td>justifying procedures</td>
</tr>
</tbody>
</table>

| self-regulation | self-examination | self-correction |

**Materials**

1. Initial surveys
2. Post-intervention surveys
3. Thesis research lesson - 01 - Presentation.pptx
<table>
<thead>
<tr>
<th>Activity</th>
<th>Procedure</th>
<th>Int</th>
<th>Time</th>
<th>CT</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review / Preview</td>
<td>- Check previous homework</td>
<td>Ss-Ss</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Introduce topic (ppt2)</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Introduce objectives (ppt3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm-up</td>
<td>- In groups, identify emotions from pictures (ppt4)</td>
<td>Ss-Ss</td>
<td>10</td>
<td></td>
<td>exaclarcon</td>
</tr>
<tr>
<td></td>
<td>- Brainstorm list of emotions in groups</td>
<td>S-Ss</td>
<td></td>
<td></td>
<td>Ask for reasons why these people feel this way</td>
</tr>
<tr>
<td></td>
<td>- Volunteers from each group write lists on board</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td>Use book if necessary (p20, 23)</td>
</tr>
<tr>
<td></td>
<td>- Check comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participal</td>
<td>- Underline all participial adjectives on board</td>
<td>T-Ss</td>
<td>15</td>
<td></td>
<td>catdecdra</td>
</tr>
<tr>
<td>adjectives</td>
<td>- In groups, have students determine difference between <em>ed</em> and <em>ing</em></td>
<td>S-Ss</td>
<td></td>
<td></td>
<td>Grammar explanation (p138)</td>
</tr>
<tr>
<td></td>
<td>- Elicit explanations, explain further (ppt5-6)</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td>- Look at samples (ppt7; p23-24)</td>
<td>T-Ss</td>
<td>15</td>
<td></td>
<td>clarstadra</td>
</tr>
<tr>
<td></td>
<td>- Demonstrate and go in pairs</td>
<td>S-S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Repeat with new format (ppt8; p23-24)</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Demonstrate and go</td>
<td>S-S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real cons.</td>
<td>- Explain examples (ppt9-10)</td>
<td>T-Ss</td>
<td>15</td>
<td></td>
<td>decexastra</td>
</tr>
<tr>
<td></td>
<td>- Grammar check 2 and 3 (p25)</td>
<td>S-S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Check in pairs then as a class if necessary</td>
<td>S-S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td>- Discuss photos (ppt11-17)</td>
<td>Ss-Ss</td>
<td>20</td>
<td></td>
<td>dra</td>
</tr>
<tr>
<td></td>
<td>- Discuss shopping online (ppt18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review / Preview</td>
<td>- Elicit what was covered</td>
<td>Ss-Ss</td>
<td>15</td>
<td></td>
<td>asaconsexco</td>
</tr>
<tr>
<td></td>
<td>- Preview next class – superstitions</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td>Write corrective feedback on board while discussion is taking place</td>
</tr>
<tr>
<td></td>
<td>- Corrective feedback</td>
<td></td>
<td></td>
<td></td>
<td>Homework p21</td>
</tr>
<tr>
<td></td>
<td>- Assign homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C: Intervention Two Lesson Plan
<table>
<thead>
<tr>
<th>Course: English Expressions 1</th>
<th>Length: 50 mins x2</th>
<th>Class: 2</th>
<th>Topic:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expressing feelings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grammar</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use <em>if</em> and <em>when</em> and appropriate tenses to talk about real conditional events.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use plurals and simple tenses to talk about regular things.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use cause and effect clauses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• sharing feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• talking about good and bad news</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• inferring feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• identifying reasons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• discussing superstitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Critical Thinking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interpretation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• categorization</td>
<td>cat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• decoding significance</td>
<td>dec</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• clarifying meaning</td>
<td>clar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• examining ideas</td>
<td>exa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• identifying arguments</td>
<td>ide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• analyzing arguments</td>
<td>ana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• assessing claims</td>
<td>asc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• assessing arguments</td>
<td>asa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• querying evidence</td>
<td>qev</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• conjecturing alternatives</td>
<td>con</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• drawing conclusions</td>
<td>dra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>explanation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• stating results</td>
<td>sta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• justifying procedures</td>
<td>jus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• presenting arguments</td>
<td>pre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-regulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• self-examination</td>
<td>sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• self-correction</td>
<td>sco</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• words to describe feelings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• participial adjectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>depressed(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>excited(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disappointed(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>relaxed(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>delighted(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfied(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>surprised(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ashamed/shameful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exhausted(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frustrated(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>annoyed(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>confused(ing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>angry</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Materials**

1. Post-intervention survey
2. Final surveys x2
3. Thesis research lesson - 02 - Presentation.pptx
4. Thesis research lesson - 02 - Ranking chart.docx
5. Thesis research lesson - 02 - Superstitions.docx
<table>
<thead>
<tr>
<th>Activity</th>
<th>Procedure</th>
<th>Int</th>
<th>Time</th>
<th>CT</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review /</td>
<td>• Check previous homework (p21)</td>
<td>Ss-Ss</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preview</td>
<td>• Introduce topic (ppt2)</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Introduce objectives (ppt3)</td>
<td>Ss-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm-up</td>
<td>• Review grammar (ed/ing; present real conditionals)</td>
<td>T-Ss</td>
<td>10</td>
<td></td>
<td>cat exa</td>
</tr>
<tr>
<td></td>
<td>• Discuss shopping online (ppt4)</td>
<td>Ss-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future cond.</td>
<td>• Students discuss superstitions (ppt5)</td>
<td>Ss-Ss</td>
<td>15</td>
<td></td>
<td>clar dec cat dra</td>
</tr>
<tr>
<td></td>
<td>• Clarify understanding</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Distribute superstitions handout and students read</td>
<td></td>
<td></td>
<td></td>
<td>Review modals if necessary.</td>
</tr>
<tr>
<td></td>
<td>• Matching with partners (ppt6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Point out conditionals in article and elicit diff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Explain grammar (ppt7-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td>• Practice life path using (ppt9)</td>
<td>Ss-Ss</td>
<td>10</td>
<td></td>
<td>clar exa jus</td>
</tr>
<tr>
<td>Practice</td>
<td>• Distribute worksheet and explain (ppt10-12)</td>
<td>T-Ss</td>
<td>40</td>
<td></td>
<td>dec exa ana qev con dra jus pre</td>
</tr>
<tr>
<td></td>
<td>• Students fill out ranking</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Groups negotiate ranking and write on board</td>
<td>Ss-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Show Coastguard expert analysis (ppt13)</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tally scores and declare a winner</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Time Remains</td>
<td>• List superstitions in groups (ppt14)</td>
<td>Ss-Ss</td>
<td>5-10</td>
<td></td>
<td>exa con dra</td>
</tr>
<tr>
<td></td>
<td>• Use (ppt15) for help if necessary or for review</td>
<td>T-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discussion (ppt16)</td>
<td>SS-Ss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review /</td>
<td>• Elicit what was covered</td>
<td>T-Ss</td>
<td>10</td>
<td></td>
<td>asa con sex sco</td>
</tr>
<tr>
<td>Preview</td>
<td>• Preview next class – Mike</td>
<td></td>
<td></td>
<td></td>
<td>Write corrective feedback on board while discussion is taking place</td>
</tr>
<tr>
<td></td>
<td>• Corrective feedback</td>
<td></td>
<td></td>
<td></td>
<td>Homework p27</td>
</tr>
<tr>
<td></td>
<td>• Assign homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D: Informed Consent Letter – English Version
December 24th, 2015

Dear participant,

I am a graduate student at Hamline University in Minnesota. As a part of my degree, I’m writing a capstone (thesis) and would like to do research in our classroom and I need help to proceed. I’m writing this to ask for your participation in my research. The research will be considered public scholarship and the abstract and final product will be cataloged in Hamline’s Bush Library Digital Commons, a searchable electronic repository, and it may be published or used in other ways like in an academic journal or conference presentation. In all cases, your identity and participation in this study will be confidential.

I want better understand how students are motivated to learn English and to see if we can use critical thinking activities in the classroom to help improve motivation. I will teach the class four times, and we will focus some of our activities on critical thinking skills. Before I teach, I plan to give questionnaires to participants regarding their feelings toward English study as a whole. After each time I teach, I will give participants questionnaires on specific in-class activities. Once I have taught four times, I will give participants a questionnaire on their overall feelings toward critical thinking in the classroom and on the critical thinking they do in their English classes. I may also request to interview participants once all the activities are finished. The interview would take no more than 30 minutes. I will report your answers to the questions, but I will not use any names. No one will know that you are part of the research and it will have no impact on your grade in the class.

There is little to no risk if you choose to be involved. If you request, you can receive a summary of the results or a copy of the final product. The questionnaires will be distributed before and after class and should take no more than a few minutes each to complete. The interviews will be conducted at a place and time that are convenient for you and should take no longer than 30 minutes.

Participation in any of this research is voluntary, and, at any time, you may decline to be interviewed or to complete a questionnaire and to have any of your previous content deleted without negative consequences. All results will be confidential and anonymous. Pseudonyms for the school, classes, and participants will be used. The interview recordings will be destroyed after completion of my study.

Hamline University has given permission for this research. The Korea Aerospace University English Department has given permission for this research. I also need your permission. If you do not want to be in the research, that is ok. If you want to leave the research later, that is ok too.

If you agree to participate, keep this page. Fill out the duplicate agreement to participate on page three and return it to or copy the form in an email to me no later December 24th. If you have any questions, please contact me.

Sincerely,

Andrew Parker
Informed Consent to Participate in Research

Keep this full page for your records.

I have received the letter about your research study for which you will be distributing questionnaires, teaching lessons, and interviewing participants. I understand that participating poses little to no risk for me, that my identity will be protected, and that I may withdraw from the research at any time without negative consequences. I agree to participate in the study.

Signature__________________________    Date___________________________
Informed Consent to Participate in Research

Return this portion to Andrew Parker.

I have received the letter about your research study for which you will be distributing questionnaires, teaching lessons, and interviewing participants. I understand that participating poses little to no risk for me, that my identity will be protected, and that I may withdraw from the research at any time without negative consequences. I agree to participate in the study.

Signature__________________________    Date___________________________
APPENDIX E: Informed Consent Letter – Korean Version
저는 미국 미네소타의 해믈린 대학(Hamline University)의 대학원 과정에서 영어 교육을 공부 중인 파커 앤드루입니다. 현재 대학원 졸업 논문 작중 중에 있으며, 논문 작성에 필요한 교실 수업에서의 연구 실험이 여러분의 참여를 부탁 드리고자 이 글을 써서 있습니다.

저는 학생들의 영어 학습을 이끄는 동기에서 연구를 하고 있으며, 여러분과 함께하는 총 4 번의 교실 속 실험 수업을 통해 비판적 사고 활동이 학생들의 학습 동기 강화에 도움이 되는지를 살펴 보고자 합니다.

수업 전에는 먼저, 영어 학습에 대한 몇 가지 설문이 있을 것이며, 매 수업 후에는 수업 중 진행한 활동에 대해 구체적으로 묻는 설문을 드리게 될 것입니다. 4 번의 수업을 다 마친 후에는 여러분들에게 교실에서의 비판적 사고에 관한 전반적인 느낌과 영어 수업에서 한 비판적 사고에 대해 묻는 설문이 있을 것입니다.

모든 실험이 끝난 후에, 필요에 따라 소수의 일부 참여자에게는 추가 인터뷰를 요청할 수 있을지도 모릅니다. 인터뷰가 있을 시에는 30 분 이내가 될 것이며, 인터뷰에서의 모든 질문에 대한 답변 내용은 기록될 것이지만 참여자 여러분의 이름은 사용되지거나 기록되지 않을 것입니다.

여러분이 연구에 참여한 사실은 어느 누구에게도 밝히지 않을 것이며, 수업에서의 여러분의 성적에 어떠한 영향도 가지지 않을 것입니다. 실험 참여에는 어떠한 위험도 없으며, 만약 요청이 있을 시에는 여러분은 연구 최종 결과물의 요약 내용에 대한 정보를 받을 수 있습니다.

설문지는 수업 전후에 배부될 것이고, 작성에 몇 분 정도만이 소요될 것입니다. 인터뷰는 참여자에게 편한 장소와 시간에 실시될 수 있으며, 30 분 미만이 소요될 것입니다.

본 실험이 연구는 자발적인 참여에 의해 이루어지는 것을 원칙으로 하며, 언제라도 참여 및 인터뷰를 거절할 수 있으며, 설문 참여에 반응할 수 있고, 부정적인 영향 없이 이전 참여 내용에 대한 삭제 요청도 가능합니다. 모든 결과는 익명과 기밀로 처리될 것입니다. 학교 및 수업, 참가자들의 모든 이름은 익명으로 처리될 것입니다. 인터뷰 기록 역시 제 연구가 완료되면 삭제가 될 것입니다.

본 실험이 연구는 해믈린 대학과 한국항공대학교의 허가를 받았습니다. 실험이 연구의 진행을 위해서는 여러분의 동의 및 허락이 필요합니다. 연구 진행을 위해 본 실험이 연구에 참여를 부탁 드리는 바입니다.

만약 본 실험이 연구에 허락 및 동의를 해 주시면, 2~3 페이지에 있는 참여 동의서에 서명을 하신 후, 2 페이지 양식은 보관을 하십시오, 3 페이지 양식은 제출해 주시면 되십시오. 또는 12 월 24일까지 사본을 제 이메일로 보내주시도 됩니다. 더 궁금한 사항이 있으시면 아래의 제 메일로 연락을 주시면 감사하겠습니다.

Andrew Parker

경기도 고양시 덕양구 항공대학로 76

02-300-0346
 parker@kau.ac.kr
본 연구에 참여하기 전 본인은 연구자에게 연구의 목적, 내용, 절차에 대해 충분한 정보를 받았으며, 연구 과정에서 제공한 자료는 연구 이외에는 어떠한 목적으로도 사용되지 않을 것이고, 참가자의 익명을 보장한다는 내용을 이해했습니다. 또한 본 실험 연구에는 어떠한 위험도 따르지 않고, 요청 시 어떠한 부정적인 영향 없이 연구 실험 참여를 취소할 수 있다는 내용을 이해했습니다. 이상의 모든 내용을 알고 본인은 본 연구에 참여할 것에 동의합니다.

참여자 이름: ___________________________
참여자 서명: ___________________________
서명일: 2015 년 12 월 ____일
연구 실험 참여 동의서

< 연구자 Andrew Parker 에게 제출용 >.

본 연구에 참여하기 전 본인은 연구자에게 연구의 목적, 내용, 절차에 대해 충분한 정보를 받았으며, 연구 과정에서 제공한 자료는 연구 이외에는 어떠한 목적으로도 사용되지 않을 것이고, 참가자의 익명을 보장한다는 내용을 이해했습니다. 또한 본 실험 연구에는 어떠한 위험도 따르지 않고, 요청 시 어떠한 부정적인 영향 없이 연구 실험 참여를 취소할 수 있다는 내용을 이해했습니다. 이상의 모든 내용을 알고 본인은 본 연구에 참여할 것에 동의합니다.

참여자 이름: ___________________________  참여자 서명: ___________________________
서명일: 2015 년 12 월 ____일
APPENDIX F: Open-ended Questionnaire Responses
Motivation Background Questionnaire Comments

- “I think most of student think learning english is very important. But they don't know that 'What am I do to say english nice!!!' There is no visible answer.... Maybe Korea's english education is focused on grammar, voca..and writing things, not the pronunciation or speaking..., but I think if voca and grammer not so exactly, Speak with native pronunciation and word... is more helpful to learn english.”
- “In korea, I just learned how to read english, not how to speak and hear. So when I traveled other country or talking to foreigner it was really hard...”
- “In my case, I study English to get into college or use it as a tool to get a job but I want to work in a foreign company with foriegners and surrounded by foreign culture so it makes me want to study English more now.”
- “In my opinion,much experience of conversation english is best way to study english.”
- “Expression is interesting”
- “I'm curious and looking forward to participating.”
- “I hope to be more fluent. I think most Korean student also want to be. But circumstance of education of English in Korea is too limited, especially about speaking. So I'd like to get more chance to meet native speakers and be nice not only for test but want really enjoy. Thanks.”
- “Wonderful”
- “In Korea people can study reading and listening by themselves but it's really hard to study speaking and writing by themselves. So people have different levels of skills in English. If students aren't majoring in English, I don't think it's good to have relative grading for English classes in school.”
- “It's possible but the English interview might be difficult.”
- “I think I must learn Engl. Because many job's doc or programs are made by USA or Europe.”
- “I had been studying English for a year abroad. So I can speak over with my foreign friends though it is not so fluent. And I guess with foreign native teachers' style of teaching is good enough.”
- “I want to study English because I want to get a job abroad after graduating.”
- “I think that changing students mind is better than studying english in classes”
- “nope”
- “Learning english is very important for my future and is very interesting also.”
Motivation Background Questionnaire Comments cont.

- "sometimes teacher's say is too fast and sometimes i'm not understand what he sayㅜㅜ"
- “No”
- "English is very important to get a good job. But it is not funny because there are to many voca and difficult grammer. Therefore I am not fluent to talk english, so I am too nervous when I participate in class and do some mistake.”
- “It's nessasary to get a job, so that's too stress for me."
- “I like to talk foreigners. So I want to get more chance to communicate with them.”
- “so tense”
Post-intervention One Questionnaire

- “It helped me a lot for my English conversation. Thank you.”
- “It’s a wonderful class”
- “I’m so excited!!”
- “funny”
- “I think i hav to learn the expressing, but this class say about grammar something.... it is not a good point “
- “I’d like to say I felt soso. Cuz I think speak up in the activities is important.”
- “nope”
- “It's very funny”
- “It was so much fun! Happy holidays!”
- “The desk arrangement interfered with my focus on the class.”
- “Thank you “
- “I am easy to be shy so I think I didn't participate in perfectly. But I tried if someone who taked part in this class he/she must be good”
- “No, there isn't”
Post-intervention Two Questionnaire

- “Happy”
- “Thank u:)”
- “Good Luck!! Thank You :)”
- “So far so good :)”
- “it's been good days with you, thank you for teaching me :)”
- “good!! “
- “It was so exiting class with Andy I hope to see you againg at another class!”
- “I have Nothing to say about”
- “Very funny!”
- “You're a good teacher”
- “Interesting !”
- “Very funny!”
- “I love Minessota timberwolves and my favorite player is KG. I felt very proud of getting his number 21. First of all, it is enough to be given this number. Andrew is very good teacher and his programms and tutoring style is good. I feel really good because of these classes. Thank you.”
- “I liked your material about grammer that was so organized.”
Follow-up Critical Thinking Questionnaire

Classrooms that employ critical thinking are more fun and interesting.

- I think practical using is more important
- Because we can get the basic meaning without the perfect grammar and vocabs.
- I think if we study language focus on the grammar and vocabs, it is not practical. Eventhough it is not perfect, I think having more communication in that language helps more.
- After some of learning and studying grammars and vocabs, I feel speaking is more important.
- I think conversation skills are more important than that.
- Studying vocab is important but grammar focused class might decrease the interest of the learning English of students.
- Speaking is more important
- Communication is most important.
- Grammar is very important to people use another language
- I think having more experience in English communication and getting used to that is more important that just studying the grammar and vocabs in learning language
- I believe that English is a communication tools not a subject to study.
- The vocabulary is the basis in English communication and the grammar is mandatory thing to speak high level English.
- It's not useful in daily life
- There's another way to work it. Cuz we can take lots of word in a conversation and memorize it easily and effectively.
- Speaking out the English and knowing the English vocabs & grammar is different. So, communication class is also important.
- Long time ago i learned
- Speaking is the most important. By expressing english, the other (grammer...) will be more easy
- I think speaking is most important
- I think momorizing vocabs is more important than grammar.
- To make english expression, it is very important things
- Communication is most important.
- Basic of English
Classrooms that employ critical thinking are more fun and interesting. cont.

- It is important to speak with others using English. So speaking is most important.
- English is art, not a science
- Cause it' need to improve my English speaking skills
- Confidence and learning from mistakes are more efficient
- I think that speaking and writing English is more important.
- Understanding the text/communication situation is most important in any country than knowing just the grammar.
- I think it is most important to speak out my opinion logically in English, for that studying vocabs and grammar is necessary.
- although I have a little mistakes of grammer, Trying to expresss in English is important
- I think it's more important to talk to someone in English than to memorize words
Using critical thinking in the English classroom helps me to learn English.

- I speak/talk more with critical thinking.
- because it is language.
- Open mind(the attitude to accept other ideas) is more important than the critical thinking.
- Because we can study more expressions
- It helps to development students' abilities to think in English.
- It makes students think more how/what to speak in English.
- It makes students to more active speaker. Because we want to express our opinions better and more.
- If I use critical thinking in the English it actives my brain to learn.
- It is more memorable and effective.
- We can see the world with various view
- More think will help us to speak our opinion. It should be helpful.
- I could talk more.
- I think other side
- Can use other grammer or others
- so many words need to say
- If i use critical thinking, it's easier to find wrong things
- Cause I'm learning from native speaker he definitely know better than me
- It was limmited to speak out what I think in English.
- It helps to think more.
- critical think makes express
- It has a lot of chance to discuss with others
Classrooms that employ critical thinking are more fun and interesting.

- It helps to think creatively.
- It depends on the subject but it is funny at almost time.
- It is fun.
- It is good to understand other people have different ideas.
- Because I don't like one way learning.
- It gives me the chance to think about how different could be my opinion and others.
- Not only for English but we learn more knowledge of life.
- It made us to talk a lot more so, it was good, but I worried a little bit to hurt other peoples heart when I said No.
- I always think anytime other side
  - Same reason upper question
- I can learn more English expression
- because many words to need
- It's just fun hahaha
- Questioning is always good
- It is interesting for sure.
- It is difficult to speak my critical thinking in English.
- just fun. no boring
- it is interesting to listening to others
When I use critical thinking in the English classroom I am more motivated to study, learn, and or speak English.

- Because it makes us think more (use brain more).
- It is not easy but it motivates to make more and better english sentences.
- Because I have to explain the reason why I thought like this.
- It makes me feel more interested in English studying through the activities with critical thinking, and makes me try harder to use English.
- It makes me more active english speaker because I want to speak out my opinion. Thank you Andy
- Especially it's important to prepare interview in English.
- I am not become passive
- Same reason^^
- I wish my English were that good to speak out my critical opinions.
- I dont know why do we have critical thinking for studying english
- Same with another answer
- Same as 4
- It derives more active participation of students in the class.
- It is good to use English in speaking out our real thinking in this class than the class which asks us to speak what we just learened from textbook.