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# An Examination of How Adult English Second Language Learners Learn Pronunciation Skills

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AN EXAMINATION OF HOW ADULT ENGLISH SECOND LANGUAGE LEARNERS  
LEARN PRONUNCIATION SKILLS

by

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Presented to Doctor of Educational Leadership Department and the  
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## **Abstract**

This study examined research questions regarding differences in intelligibility levels of spoken English as a Foreign Language (EFL) and the use of pronunciation drills between two groups: control and treatment. The goal of this study was to discover if even short-term use of dedicated pronunciation drills (simple tongue twisters and voice exercises) in the EFL classroom was sufficient to significantly improve pronunciation in the target language. This study also examined some of the historical pedagogies and methodologies used in pronunciation teaching. Lastly, this research investigated whether or not there were any correlations between the use of and non-use of dedicated pronunciation drills within the EFL classroom. The results showed statistically significant improvement in intelligibility in both groups.

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gave up on me, but rather, patiently guided me through all the vicissitudes of my studies and research. Words cannot express my heartfelt thanks and appreciation.

### **Dedication**

I dedicate this dissertation to my parents, Dolores M. Pagnotta-Lyst and Thomas J. Pagnotta, both of whom passed away before its completion. They gave me life, education, love, and so much more. I believe that this is an accomplishment that they would both be proud of. I love you, Mom and Dad!

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## **Chapter I**

### **Introduction**

Learning a second language is never easy, and particularly so for adult learners. Second language acquisition for adults is a complex, multifaceted process, and there is a growing concern among educators that older, more established methods of instruction may not be the most effective for adults, especially for those learning English. Because of the growing and widespread use of the English language on internet sites for global marketing, sales, education, and more, there are increasing numbers of adults who are trying to learn a second language (primarily English) in order to be able to compete and to be employable in the rapidly changing economic landscape. Many small business owners are facing the necessity to expand into the global market in order to simply maintain their humble market share and provide for their families. Larger companies are faced with similar problems but on a much larger scale. For many employers and employees it is no longer feasible to merely speak their native tongue; English is emerging as the global requisite second language, the language of business, commerce, finance, education, and travel. Researchers (Derwing & Munro, 2005; Foote, Holtby, & Derwing, 2011; and Isaacs, 2009) have taken note of this sudden surge in attempted second language acquisition. Derwing and Munro examined accentedness in English second language learners and revealed the dearth of adequate teacher training in this field. Additionally, Foote, Holtby, and Derwing conducted surveys (and follow up surveys) of pronunciation training in adult ESL classrooms. Through these surveys, it was discovered that although the teachers felt confident in their teaching abilities, many wanted more professional training in pronunciation teaching. Further, Isaacs noted that although English second language acquisition continues to increase, pronunciation training is still being marginalized. Moreover, as the numbers of ESL

and EFL students continue to rise, it is crucial to understand how adults can most effectively learn a second language. This is particularly true in South Korea.

As an English teacher working in South Korea for the past ten years, discovering how adults learn a second language has become my passion. The first time I boarded a plane to South Korea I began a long journey of experiencing another culture through the working environment and everyday life. From the minute I stepped foot on South Korean soil, I felt like the South Korean culture had welcomed me with opened arms, and I felt humbled by the struggles of students to acquire a second language, English.

I have discovered that one of my greatest strengths as a teacher is my ability to make other people feel comfortable around me, comfortable enough to openly explore their own abilities, to learn, and to make mistakes (not an easy thing to do in the South Korean culture). As Noddings (2003) explains in her book, *Caring: A Feminine Approach to Ethics and Moral Education*, "She is present to the other...she does not abandon her own ethical ideal... but she starts from a position of respect or regard for the projects of the other" (p. 176). I firmly believe that this respect and regard for the other person's project is vital and empowers others to a higher ethical calling. I have learned that my ability to put people at ease is a huge strength in the educational process especially in second language acquisition. Using this strength in my professional capacity continues to aid my students in their quest for English language skills because second language skills that are acquired in a relaxed setting are skills that will be easily accessed for conversational purposes (Harmer, 2007).

Many people, around the world and here in South Korea, believe that learning English will help them improve their standard of living, and in my experience, most university students in South Korea would agree. If my exploration and investigation into how adults can learn

English more easily and effectively can help students achieve their goals, I believe I will have accomplished part of my goal as an educator and contributed to the common good.

### **Is the proverbial deck stacked?**

Here is the rub: some researchers (Abello-Contesse, 2009; Bongaerts, Planken, & Schils, 1995; Lenneberg, 1967; Moyer, 1999; Penfield & Roberts, 1959; and Young-Scholten, 2002) claim that unless second language acquisition takes place prior to adolescence, second language skills become nearly impossible to gain. This is known as the critical period hypothesis (CPH). Originally proffered by Penfield and Roberts in 1959, and later popularized by Lenneberg in 1967, the critical period hypothesis states that if language acquisition does not occur in the first, formative years of life, a person will never fully gain command of language. According to the CPH, if a person does not receive sufficient first language input stimuli early in life, that person will never achieve proper linguistic control. These earliest years of life are the most critical for language acquisition and there is only a limited window of time to acquire first language skills. After this critical period has lapsed, language acquisition becomes far more difficult and often times, unachievable. Additionally, this ideal window of time for first language acquisition, during the early years of life, has been extended by some theorist (Bongaerts, Planken, & Schils, 1995; Moyer, 1999; Young-Scholten, 2002) to include second language acquisition as well. Abello-Contesse (2009) argues that the earlier second language acquisition is initiated, the better, implying that adults have little chance of success in acquiring a second language.

As a professor at a university in South Korea, I was intrigued and frustrated by the idea that second language acquisition was nearly impossible for adults. Since I was faced with this very task on a daily basis, I set out to challenge the critical period hypothesis (CPH) at the very least, and to disprove it if I could. In doing so, I have witnessed both the struggles and successes

of adult second-language students. I consider myself somewhat of a transformational educator in that I try to always have a congenial and approachable demeanor so that my personality becomes more charismatic and inviting, thereby empowering my students to follow my lead and risk making mistakes. I envision myself as a strong yet caring educator, able to lead students with kindness and fairness. Noddings (2003) writes: "...one caring receives the other... completely and non-selectively" (p. 176). Being receptive to others completely and non-selectively not only requires a high degree of understanding and acceptance of other peoples' individuality and culture, but also aids in providing a more relaxed educational environment for students. And, as Krashen (1985) notes, second language skills that are studied in a stress-free environment are skills that will be easily used in spontaneous conversation. By helping to create a stress-free learning environment for students through my personality and my approach to teaching, I hope that I was able to begin to counter the negativity of the CPH theory and demonstrate the effectiveness of the use of pronunciation drills in working with adults in a Korean university.

In order to contend in the rapidly changing global economic landscape in which the ability to read, write, and speak the English language has become vital, more effective pronunciation skills instruction is required. Upon entering the Asian culture of South Korea a decade ago, it became apparent that students were over-worked and considered "...cogs in the country's economy with no right to personal happiness" (Koo, 2014, p. 45). If educators can help relieve some of the stress associated with simply being a student in South Korea, hopefully the students will relax more and, in turn, learn more and remember it longer.

Universities around the world have incorporated mandatory two years of English conversation classes in their curriculum as part of a four year degree program. Upon entering a university directly from high school, many young adults in foreign, non-native English speaking

countries have little or no prior speaking experience in English. Thus, they find it difficult to compete in an EFL classroom. And, in order to maintain good grades these students must acquire all of the second language skills (including reading, writing, listening, *and* speaking). The good news is that, because of the vast majority of websites and text books offered only in English, many of these same students become highly motivated to learn English. After having spent ten years in a non-English speaking educational environment (South Korea), I have witnessed the heroic efforts of adult students who are trying to compete in EFL in order to complete a four year university degree program. Often these struggles are laden with pronunciation difficulties. Witnessing the struggles of these students has prompted me to delve more deeply into the area of pronunciation and intonation in second language acquisition, specifically English, in order to assist students with their learning. According to Derwing and Munro (2005) and Isaacs (2009), pronunciation skills will profit from a greater alliance with researchers and designers of educational materials. I hope to contribute to this area of research.

Although improper pronunciation has often been cited as being responsible for the breakdown in communication efforts (Isaacs, 2009), incidents of discrimination (Lippi-Green, 1997; Munro, 2003) and financial loss (Davila, Bohara, & Saenz, 1993; Reitz & Sklar, 1997), training in pronunciation skills development for teachers is still lacking. For example, in a survey of Canadian ESL teachers, only 30% of the respondents had received any training in pronunciation teaching (Breitkreutz, Derwing, & Rossiter, 2001). Hopefully, this research study will add to this much needed and still growing knowledge base.

### **Problem Statement**

The purpose of this research was to examine if a dedicated pronunciation-learning program will enhance English pronunciation skills among adult students who are learning



English as a Foreign Language (EFL) and/or English as Second Language (ESL). The dedicated pronunciation-learning program included the techniques of vocal warm-ups (voice exercises), tongue-twisters, and simple rhymes in the target language (English) for a small portion of each class. The classes were two hours per class and met twice per week, therefore the dedicated pronunciation-learning program was approximately ten to fifteen minutes per class.

Using a quasi-experimental design, the results of delivering a dedicated pronunciation-learning program to a treatment group was compared with the results of a traditional language-learning regime delivered to a control group. The research study included two recordings of all the volunteer student participants' (both the control group and the treatment group) pronunciation of forty, single-syllable, CVC (consonant-vowel-consonant) words, once at the beginning and once at the end of the research period. I recorded the volunteer student participants voices on a laptop computer equipped with WavePad software technology using a PA Cyber Acoustics headset with microphone in a quiet area of my office located on the campus of Woosong University (East Campus) in Daejeon, South Korea. These recordings were rated each time by two native English speaking North American professors. The ratings from the two recordings were compared and analyzed using a sample t-test. The findings from this study have hopefully added to the understanding of effective ways to teach pronunciation skills to adult EFL and ESL learners. Additionally, the findings from this study have hopefully provided some further and much needed insight for teachers regarding the development of effective pronunciation skills instruction.

## Research Questions

### *Research Question # 1:*

Is there a significant difference in intelligibility between the treatment group utilizing a dedicated pronunciation-learning program and the control group?

### *Research Question # 2:*

Can short-term exposure to pronunciation drills significantly improve target pronunciation in adult second language learners?

### *Research Question # 3:*

Can the use of simple tongue twisters and voice exercises suffice as pronunciation drills to significantly improve pronunciation skills in adult second language learners?

## Key Terms

*Dedicated pronunciation learning program:* ten to fifteen minutes per forty-five to seventy-five minute class period, one or two classes per week, of specific English pronunciation drills.

*EFL:* English as a Foreign Language.

*ESL:* English as a Second Language.

*Heutagogy:* the study of self-determined learning (Blaschke, 2012), using some of the principles from andragogy, the method of teaching adult learners, and incorporating the philosophy of information sharing rather than information hiding.

*Intelligible (Intelligibility):* the ability to be understood. For the purpose of this research, "intelligible" will refer to the ability to be understood as rated by native English speaking, North American faculty members on a three-point scale: correct, minimal pair, or other.

*Lexical:* of or relating to the words or vocabulary of a language (Nation, 2001).

*Linguistic*: of or relating to language.

*Orthographic*: the art of writing words with the proper letters according to standard usage. Also, orthography is the representation of the sounds of a language by written or printed symbols (Mirriam-Webster.com, 2015).

*Phone*: single unit of sound produced as part of a segment of speech that has distinct physical or perceptual properties (Crystal, 1971).

*Phonemic awareness*: a subset of phonological awareness in which listeners are able to hear, identify and manipulate phonemes, the smallest units of sound that can differentiate meaning (Nam, 2006).

*Phonology*: Phonology is a branch of linguistics that deals with the systems of sounds in a specific language. It is the system of relationships among the speech sounds that constitute the fundamental components of a language (Moyer, 1999).

*Prosody*: the patterns of stress and intonation in a language. Prosody is the rhythm of a language (Thirsk & Solak, 2012).

*Rater*: for the purpose of this research, a "rater" will be a native North American English speaking professor who will listen to and score the recordings of the student participants for intelligibility (Liao, 2004).

*Syntactic*: of or according to *syntax* where *syntax* is the arrangement of words and phrases to create well-formed sentences in a language (Nation, 2001).

*TOEFL*: the Test of English as a Foreign Language. TOEFL is one of the most widely used standardized tests of English language proficiency for non-native English language speakers who want to enroll in American universities, schools, and other academic and professional institutions.

*TOEIC*: the Test of English for International Communication. The TOEIC test is a test of English language proficiency designed specifically to rate the ordinary, daily English skills of people working in an international environment.

*Traditional language learning regime*: for the purpose of this research, "traditional language learning regime" will be defined as the standard English conversation class lessons that include reading, writing, grammar, sentence structure, and pronunciation as the need arises in class.

## **Limitations and Delimitations**

### **Limitations**

All research inherently has limitations. Due to time constraints, this research only examined the production and pronunciation of a select few individual sounds (phones). These phones were carefully chosen because of the known difficulty of the participants (South Korean university students) to reproduce the specific sounds for /r/ /l/ and /p/ /f/. In the Korean language (known as Hangeul) sound inventory, there is no clear distinction between the sound for /r/ and /l/. The "letter" used to represent either of these sounds is the same (ㄹ, known as "*riul*" and pronounced "lee - ool") and the sound that should be pronounced is determined by the placement of the "letter" within a word. For example, when the *riul* (ㄹ) appears as the initial letter in a Korean word, the sound is pronounced as the /l/ sound as in the word 라면 ("*ramyun*" Korean traditional noodle) pronounced /lam yon/. When the *riul* (ㄹ) appears at the end of a Korean word as the final sound as in ㄹ (Korean for "label" pronounced /pur/), the sound is pronounced more like a soft /r/ sound.

Other limitations of this research study included the timing and administration of the specific treatment to the treatment group. That is, the treatment group received ten to fifteen minutes of dedicated pronunciation drills per class with two classes per week. Also, it may be difficult to apply the findings from this research to other groups for several reasons. First, the student participants were non-randomly selected, in that they were all Korean students who were taking EFL classes with a native North American teacher. Second, the sample size was small. I sought a total of forty (40) volunteer students from English conversation classes with a native North American English teacher. Third, all student participants were adult, South Korean university students who were, at the time of the research, currently enrolled in Woosong University, Daejeon, South Korea, a specific demographic region of South Korea. And finally, the research was designed to address known pronunciation difficulties of these specific participants. This limited the scope of this research in that it may not be applicable to native speakers of other languages.

### **Delimitations**

The boundaries that I imposed on this study included the specific phones that were examined, limited to two pairs of sounds: r/ /l/ and /p/ /f/ presented through use of minimal pairs such as red/ led and poor/ for. Also, since there were no foreign students currently enrolled in these specific classes, the participants were limited to only those Korean students enrolled at Woosong University in English conversation classes being taught by native North American English speaking instructors. Finally, I set these boundaries for this research project in hopes of determining how educators can better help their adult students, specifically in South Korea. Accordingly, the age of the participants was between nineteen and twenty-five years of age, and all had limited prior knowledge of English.

## **Summary**

Chapter One introduced some of the basics of adult second language learning and some of the struggles often associated with it. I have provided evidence which displays the need for further studies into how adults acquire second language skills, with particular attention to pronunciation and diction. Additionally, both the limitations and the delimitations of my research study have been examined.

In conclusion, it appears that pronunciation and diction have received short shrift in the available literature. To further explore this, I have conducted the research as described above. Additionally, both the problem statement and the research questions have been presented. It is time to gather feedback from adult language learners and instructors. Surely, in hands-on language learning, disciplined drilling in pronunciation and diction is widely practiced and receives a proportionate amount of class time; or does it? The results of my research study have hopefully helped form a model for a revival in classroom pronunciation training and therapy.



## Chapter Two

### Review of Literature

The explosive growth of the Internet, the global community, global marketing, VoIP (Voice over internet protocol) technology, and other web based innovations have amplified the need for proficiency in English communication. The majority of these platforms offer instructions in English foremost and sometimes exclusively. For example, with the development of Web 2.0 (since 1999 websites use a newer technology that is more advanced and user friendly than earlier versions, much of which is offered only in English), programming language became less vital, but knowledge of English became even more important. Thus, many more people are experiencing a greater motivation to learn a second language (Blaschke, 2012). English language acquisition is no longer a luxury; it has become a necessity. Accordingly, ESL institutes around the world are witnessing more and more self-determined adult learners (heutagogy). Widening access to global markets and social media has thrust the English language into a role well beyond that of our planet's *lingua franca* (a term used to identify a common language which fosters communication between people who do not share a native language).

Upon entering a university directly out of high school, many young adults, having little or no prior English language experience, are finding it difficult to compete in the second language classroom. In order to navigate academia and maintain good grades, these students must acquire basic English language skills and strive for English proficiency sufficient for academic writing. Many of these students are highly motivated. Additionally, many of these same students possess tenacity and perseverance even though it would appear that the proverbial deck is stacked against the adult learner of a second language.



The following pages will address second language acquisition skills. The critical period hypothesis (CPH) and some of the debate surrounding it will be examined. A short discussion of adult learning and teaching styles and theories will follow. Next, an exploration of some of the main components of adult second language acquisition will be presented including: (a) reading and writing, with a subsection on vocabulary acquisition; (b) speaking and pronunciation skills with subsections on pronunciation teaching and drills including articulation, prosody and intonation, and phonemic and phonological awareness; and (c) motivational forces and patterns and how they apply to age appropriate second language learning for adult learners in various age groups. This section will close with a conclusion which summarizes the aforementioned.

### **Critical period hypothesis (CPH)**

As previously mentioned, the critical period hypothesis (CPH) was originally suggested in 1959 (Penfield and Roberts), reaffirmed in 1967 (Lenneberg), and asserts that if initial linguistic skills are not acquired early in life, they never will be fully gained. The CPH considers language acquisition similar to other critical biological growth periods such as vision development, and there is some debate over the length of this critical period. Additionally, this ideal window of time for first language acquisition, during the earliest years of life, has been extended by some theorists (Bongaerts, Planken, & Schils, 1995; Moyer, 1999; Young-Scholten, 2002) to include second language acquisition as well. According to research done by Abello-Contesse (2009) on the CPH, adults have long outgrown the highly language-absorbent first few years of life; the critical period for development of language fluency. The first few years of life are ideal for language acquisition and after that period, first and second language acquisition become increasingly more difficult.

However, some researchers dispute the CPH noting that second language acquisition is impacted by a number of various causes and is not merely limited to biological constraints (Bongaerts, Planken, & Schils, 1995; Moyer, 1999; Young-Scholten, 2002). Many other researchers (Bongaerts, et al., 1995; Munro & Derwing, 2008) have concluded that the CPH is not always correct, that it is dependent on diverse factors including motivation and age-appropriate educational techniques. Moreover, although accentedness presents a strong argument in favor of the CPH, some adult learners have been able to achieve native-like pronunciation. This would indicate that many issues affect articulation and pronunciation including incentive and personality, rather than merely being limited to a certain chronological growth period (Bongaerts, et al., 1995; Moyer, 1999). Hope is held out by Piehl (2011) who notes that "...adults who want to make acquiring a second language part of their lifelong-learning goals can be encouraged by research that indicates such aspirations can be reached with sufficient motivation and effort" (p. 33). Additionally, Piehl contends that adults can successfully master a second language and with enough memorizing and repetition, strong vocabulary acquisition will occur (Piehl, 2011; Nations, 2001). Munro and Derwing (2008) remind us that many adults indeed have been able to attain second language acquisition. In a longitudinal study conducted in Canada, improved intelligibility was observed in adult ESL learners who had recently arrived in Canada and had not had any special speech instruction. Merely by being immersed in an English speaking environment (Canada), these adult ESL students showed that English speaking skills can be developed in spite of the lack of any special training or instruction (Munro & Derwing).

Buoyed by this optimism, Knowles, Holton, and Swanson (2005), through their explanation of the theory of heutagogy, offer effective approaches to age appropriate education geared specifically for the adult learner which help combat the notions of the CPH. Describing

the various age groups for adults, Knowles et al., demonstrate how different learning styles and skills take place at various times during the adult life.

### **Adult second language learning and teaching**

Any discussion of how adults learn a second language should be introduced by some explanation of educational theories. The theory of andragogy explains that the difficulties that surround adult education are fraught with complications due to the complex nature of adult learning (Merriam, 1993). Adults learn in very different ways from their younger counterparts. Narrowly, andragogy is the teaching strategy that focuses on adults, but more broadly, the field of andragogy is described in many ways including guidelines (Merriam, 1993), a philosophy (Pratt, 1993), assumptions (Brookfield, 1986), and as a theory (Knowles, 1989). Andragogy may never have a single, clear definition approved by all, but will rather manifest itself as diversely as the numerous researchers in the field (Knowles, Holton, & Swanson, 2005). Yet complexity is seen as one of the strengths of andragogy: "...a set of core adult learning principles that apply to all adult learning situations" (Knowles, et al., eBook location 1678). Andragogy is often explained as the process of engaging adult students in the learning experience; as Wlodkowski (2008) notes, "...if something can be learned, it can be learned in a motivating way" (eBook location 863).

Heutagogy is an educational theory that focuses on adult learners with a more self-determined learning approach and has been called the study of learning *how* to learn. Describing heutagogy, Blaschke (2012) contends that it is a sort of evolution from pedagogy to andragogy and ultimately arriving at heutagogy with its learner-centered design. Although andragogy and heutagogy are very similar in concept, there are some notable differences. Andragogy highlights the best teaching methods for adults to learn, while heutagogy includes educational initiatives

that address the improvement of adult students' actual learning skills. Andragogy is about teaching adults; in heutagogy, the instructor helps the student learn *how to* learn.

Utilizing concepts from both andragogy and heutagogy, the instructor can determine what is best suited to help the adult student learn a second language. The concept of andragogy considers the specific needs of the adult learner and is not limited to the individual academic institution's visions. Rather, andragogy includes a more holistic approach to adult education. While the concept of heutagogy, as somewhat of an extension of andragogy, offers insights into the self-determined learner, the heutagogical approach posits that older, more mature students need less course structure and teacher instruction (Blaschke, 2012).

Education itself is described as an activity that is performed with the intention of effecting changes in knowledge while learning is more personal and refers to the changes that are expected to occur in the individual learner (Knowles, et al., 2005). In fact, educational theorist, Ivan Illich, challenges the entire idea of formal education in his book, *Deschooling Society* (1971), by stating that "...learning is the human activity which least needs manipulation by others" (p. 56). Several noted language theorists have proffered that language learning occurs as two separate actions: spontaneous and studied (Krashen, 1985; Nation, 2001; Palmer, 1921). As early as 1921, Palmer described the differences between spontaneous and studied language capabilities in his book, *The Principles of Language Study*. Palmer suggests that spontaneous language abilities are those abilities acquired subconsciously and lead to more natural spoken language. Studied language abilities are those abilities that are acquired through the conscious effort of studying text books and classroom training, enabling greater development of reading and writing skills.

American linguist and professor emeritus at the University of Southern California, Stephen Krashen, has published numerous books and papers on second language acquisition and is recognized as being highly influential in introducing many linguistic hypotheses. One such hypothesis concerning the difference between subconscious and conscious language learning has been examined by Krashen. In *Input Hypothesis: Issues and Implications* (1985), Krashen claims that language skills acquired subconsciously are easily used in conversation, reflexively, almost like a second nature. Conversely, language skills that are studied and learned in an academic framework- where the emphasis is mainly on deliberate, structured grammar and vocabulary- are more difficult to access for spontaneous conversation purposes.

Moreover, according to Krashen's (1985) affective filter hypothesis, learning is impeded by negative emotions; negative emotional responses will hinder language acquisition. Some of these negative emotions include anxiety, stress, and self-doubt all of which act as a barrier or "filter" between the instructor and the learner. These negative emotions can build psychological walls around the learner thereby preventing the proper processing of the target language. Additionally, Krashen's affective filter hypothesis states that these negative emotions can be avoided in the ESL classroom simply by sparking interest and promoting higher learner self-esteem. Krashen also emphasizes that a stress free and relaxed environment fosters greater learning particularly in second language acquisition.

### **Acquiring Second Language Reading and Writing Skills**

Adults often respond well to task-based language learning. In *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*, Knowles, Holton, and Swanson (2005) offer an in-depth explanation of what educational practices work best for the adult learner. Not surprisingly, Knowles et al., propose that when adults have a need or desire to

learn (especially a language), motivation is increased and learning occurs more quickly. Homstad and Thorson (1996) concur with this idea by suggesting that one of the ways to help adult ESL students improve their writing skills is to give substantial writing assignments which may include keeping a daily writing journal. This writing journal can become a vehicle where students are encouraged to freely explore a variety of topics and styles in the hopes of developing fluency by writing extensively without fear of being ridiculed by the instructor's red pen (PhamHo, 2014).

In keeping with the theories of CPH and according to Abello-Contesse (2009), the most effective time for learning a second language, specifically reading and writing skills, is prior to adolescence. Although there is some debate surrounding this theory, CPH says that the best time to learn a language is during childhood, and the earlier, the better. Many other researchers (Penfield & Roberts, 1959; Lenneberg, 1967) agree that adult second language acquisition is difficult if not impossible. If ample language stimuli are not provided during the critical early years, language acquisition, especially grammatical systems, may never be gained or perfected. Silva (1993) and Olsen (1999) both state that adult ESL writers cannot create an effectively written work due to the inadequacy of syntactic and lexical competence. Like an older sibling, the first will always try to dominate the second. Similarly, for the adult ESL learners, the first language will always try to supersede the second language in writing exercises. Since writing ability is said to be a more complex gauge of a person's ability to use a second language and to express ideas well (Norrish, 1983), English second language students are typically less eager to engage in second language writing activities. Writing requires a person to think and rethink in order to write coherently and effectively. The more refined the writing, the fewer traces of the first language are evident. This skill is painstaking and hard won. Thus, writing in a foreign

language is often a frustrating and difficult task for students, especially adult second language students (Homstad & Thorson, 1996). Therefore, students are reluctant to include second language writing activities in or outside of the classrooms. Second language writers experience difficulty when writing in the target language because the paradigm of their first language (their mother tongue) wields powerful influence in arrangement and usage of the second language (Wang & Wen, 2002). As a result, at times, second language learners combine the systems of the two languages in their second language writing. This phenomenon, known as language transfer or syntactic transfer, is a dominant, pervasive challenge that is seen as a deterrent for adult learners in acquiring second language skills, particularly because the second language learner often reverts to the first language in areas of writing (and often speaking, too).

Less proficient adult learners of a second language have a higher number of grammatical, orthographic, syntactic, and lexical errors (Sattayatham & Honsa, 2007) indicating that adult learners of a second language have more difficulty with second language acquisition and construction than their younger counterparts. "Because of the constraints of limited second-language knowledge, second language writing may be hampered because of the need to focus on language rather than content" (Weigle, 2002, p. 235). Weigle asserts that it is impossible for adult second language students to acquire proper second language writing skills without sufficient linguistic knowledge and training. Such linguistic training is rarely offered in the traditional second language classroom. The traditional second language classroom tends to focus simply on grammar and vocabulary (reading and writing) rather than the actual workings of the language itself, much less its intricate structure.

A pro-active learning stance has much to offer the adult second language learner. According to Fengning (2012), having the adult learner create their own study plan helps the

overall second language reading and writing process by addressing specific learning needs and goals while simultaneously aligning with age-appropriate material. Further, an up-to-date pedagogy is more than just a matter of style; it is crucial to effective teaching. Dzubinski, Hentz, Davis, and Nicolaides (2012) propose that adult learners in the twenty-first century have very different lives and learning styles than their counterparts from twenty years ago. Even a few years can leave a teacher behind, if attention is not paid to trending methods of learning. The research by Dzubinski, et al., suggests that adult second language education move away from the technical and instrumental approach and move toward a more adaptive approach to language acquisition particularly in the areas of reading and writing.

If the reading assignments are not interesting to students, they will become bored and new learning will be quickly forgotten. Reading activities that include new technologies such as email are very effective in helping adult students (Huang, Tindall, & Nisbet, 2011). Matching words with pictures and role-playing advertisements are also useful tools in helping the adult learner acquire better reading, writing, and speaking skills. Further, Nation (2001) and Huang et al. (2011), state that listening to the target language being read aloud first, while following along in the book, and then listening again while repeating phrases, help promote both good reading and writing skills. In addition, Huang, et al., note that paraphrasing is a practical and gainful device for helping adult students learn second language writing skills while enhancing students' comprehension. And, since real life activities are permeated with great teaching moments, second language reading development vastly improves in classrooms where the teacher uses real life activities (Condelli, Wrigley, Yoon, Cronene & Seburn, 2003). Although these real-life activities may vary greatly, it is the authenticity of these activities that fosters greater reading skills.



**Vocabulary acquisition.** The heutagogical approach to second language vocabulary acquisition capitalizes upon the adult strengths of expertise, enthusiasm, clarity and cultural responsiveness. This approach also suggests that with older adult students, more needs-based learning occurs. Students respond well to vocabulary activities that are task oriented such as exercises centered around employment application, banking, transportation, etc. (Kim, 2008). With all these needs and skills in mind, it is much easier to approach an adult ESL classroom with meaningful training exercises that help the students apply newly acquired vocabulary skills to significant situations with quantifiable results.

Reading comprehension and listening skills are usually acquired together with vocabulary acquisition and before speaking skills. In order for a person to be able to read an average book, they must have a vocabulary of about five thousand words (Nation, 2001). En route to this objective, the instructor must be able to introduce interesting reading topics that hold the learners attention. Likewise, the vocabulary choices should be aligned with the reading assignments, and the instructor should aim to keep the topics age-appropriate in both vocabulary and reading.

According to Nation in his book, *Learning Vocabulary in Another Language* (2001), vocabulary acquisition occurs in nine word-knowledge areas. Each of these areas is influenced by various age and skill levels. In order to successfully teach vocabulary to adult second language learners, the instructor must utilize various teaching techniques such as those outlined in the andragogical model. This model dictates that adults are more self-driven and self-motivated than other age groups and stresses task-based language exercises (Blaschke, 2012). In this model it becomes easier to identify age-appropriate learning tools to help the adult learner acquire better vocabulary skills.

It is important to use authentic activities in the adult ESL classroom particularly when introducing new vocabulary. A recent study where thirty ESL instructors of adult students were surveyed showed that more vocabulary acquisition occurred when the students were most motivated (Huang, Tindal, & Nisbet, 2011). For example, when given employment-related tasks, the students outperformed, learned the new vocabulary quicker, and remembered it longer than with more abstract material. Any assistance in navigating the labyrinth of foreign language paperwork is appreciated for its practical value, whereas arbitrary reading assignments are met with less motivation and determination, and less vocabulary recall is exhibited (Nation, 2001). Not everything in life is filling out forms, however. While it is significant to engage the adult learner in interesting topics, it is also essential to include idioms and modern vernacular to add breadth and versatility to the students' use of the language (Guy, 2004). Nation also advocates the use of spaced repetitions as more effective than the use of mass repetitions (through long vocabulary practice sessions) for solid vocabulary building in all age groups.

The notion of team teaching has also been shown to be quite effective in the adult classroom to aid the students in second language vocabulary acquisition (Laughlin, Nelson, & Donaldson, 2011). Team teaching involves more than one teacher, and therefore, more than one communication style and pedagogy. This allows the student to experience the jewel of language learning through several facets at once. The target language is spoken by two or more instructors in a variety of accents, dialects, worldviews, and vocabulary choices. It is supportive for English language instructors to have peers contribute to the lessons by shouldering some of the load with conversation and pronunciation activities. Additionally, team teaching can improve classroom time management by introducing the student to the English language through two or more

avenues simultaneously. Moreover, it is beneficial for students who are able to avail themselves of multiple instructors within the same class (Laughlin et al., 2011).

Educators would do well to consider adult second language vocabulary education in the same way any adult education is considered. The importance of a solid foundation in vocabulary cannot be overstated. Simply because we acquired our first language early in life does not mean the second language will come without great intention and struggle. Rather, with all ages of adults, second language vocabulary acquisition will be merely the first step in a difficult challenge (Boyer, 1998).

### **Speaking and Pronunciation**

Teachers have the influence to generate situations that can aid students in the learning process or prevent them from learning anything at all (Palmer, 1998). Teaching proper pronunciation skills in an adult ESL classroom is truly an adventure. It requires strategies that are intricate, extensive, comprehensive, and sensitive. This adventure beckons teachers in global settings to become more effective educators by aiding the students in proper pronunciation skills, especially so since pronunciation has been called “...an orphan in English programs around the world” (Gilbert, 1994, p. 38) who suffers from a Cinderella syndrome. Although other areas of second language acquisition have been extensively researched, pronunciation skills have received a paucity of specific systematic attention. This is partially due to the fact that pronunciation research has so many different variables that can obstruct the outcome of research including gender, motivation, field independence/ dependence, socio-economic status, etc. (Cakir & Baytar, 2014).

Recently, however, pronunciation research has gained more attention due in part to “...current methodological approaches that emphasise the integration of language components in

L2 teaching ...and ...the importance currently placed on the production of communicatively functional and socially acceptable language" (Nicolaidis & Mattheoudakis, 2012, p. 304).

Learning only the proper grammatical forms of a language is simply not enough to produce genuine communication skills in the target language. Second language acquisition for communication purposes must include speaking skills. Isaacs (2009) notes that "...researchers have acknowledged the need to complement communicative or task-based instruction with a focus on form" (p. 5), indicating that the speaking portion of second language acquisition needs to become more prominent.

Some of the best teaching methods within the ESL classroom are often laden with difficulties due to the diverse nature of the students (Derwing, Munroe, & Wiebe, 2000). Clear pronunciation instruction often becomes all the more difficult for the same reason. With so many different regional accents yielding intelligible English, it becomes more complex to determine which pronunciation is proper. Further, with such a dearth of research and teacher preparedness in the field of English pronunciation, identifying truly effective pronunciation teaching methods is challenging.

There are a steadily growing number of adults who are trying to improve their English pronunciation skills in an endeavor to speak with more confidence and clarity. According to Kang, Rubin, and Pickering (2010), clear pronunciation and intelligibility "...relate in complex ways to native speaker (NS) judgments of English language learners' (ELL) oral proficiency" (p. 554). While Foote, Holtby, and Derwing (2011) tell us that second language learners feel that native English speakers would respect them more if they had better pronunciation skills. Many second language learners feel that clear pronunciation and articulation are related to social status. Accordingly, ESL learners worldwide are attempting to improve their English speaking skills

and comprehensibility as defined as "...the listener's ability to understand the meaning of an utterance in context" (Kang et al., p. 554). In a survey of one hundred adult ESL learners in Canada, Derwing, and Rossiter (2002) report that more than half of the learners note pronunciation contributed to breakdowns in communication. Additionally, other researchers state that some ESL learners have experienced prejudice and even economic penalties due to poor English pronunciation skills (Foote, Holtby, & Derwing, 2011; Davila, Bohara, & Saenz, 1993). However, the likelihood of inadequate communications and financial consequences due to language bias has and continues to swell: "the potential for miscommunication and even language-based discrimination has increased" (Derwing & Munro, 2005, p. 380). Adult learners of English as a second language are trying to produce more intelligible English in an effort to be understood in the target language. Unfortunately, many ESL instructors still lack the skill and/or training to teach proper pronunciation skills (Foote, Holtby, & Derwing, 2011) and therefore, prefer not to include pronunciation education in their courses (Cakir & Baytar, 2014). Although many ESL instructors feel confident in their teaching abilities, a research study by Foote et al. (2011) reveals that still many others would favor more professional development in pronunciation teaching (p. 3) especially with sounds that are not found in their native language inventory.

Speaking skills in adult learners of a second language can be promoted through various techniques. A survey conducted in Canada studied the time spent and techniques used in the teaching of pronunciation in adult ESL programs (Foote, Holtby, & Derwing, 2011). The results indicate that many of the respondents had very little (if any) pronunciation training and would have liked further education in how to teach pronunciation skills. In recent years, although second language acquisition has become much more popular, the speaking aspect of second

language acquisition has been marginalized. Breitkreutz, Derwing and Rossiter (2001) surveyed sixty-seven second language instructors across Canada and discovered that, although more pronunciation instruction is being delivered into the second language classroom, many of the instructors are under-prepared or unprepared. These survey results indicated that adults were having difficulty learning the correct pronunciation of the target language with sounds such as /p/ and /b/ and further indicate difficulties with the sounds associated with the letter combinations /th/, /sh/, and /ch/ possibly because some of the particular sounds of the English language sound inventory are not present in the learners' first language sound inventory (Cakir & Baytar, 2014).

Despite data that indicates speaking and pronunciation in the second language classroom have been neglected in recent years, studies have shown that it is still of great importance to both the educator and student alike (Deng, Holtby, Howden-Weaver, Nessim, Nicholas, Nickle, Pannekoek, Stephan & Sun, 2009). There is still much work to be done in the area of developing ESL pronunciation teaching methods and strategies. Second language educators must be informed as to best practices for helping adult students learn the specific sounds of English as their second language.

**Pronunciation teaching and drills.** DeKeyser suggests that, for adult learners, "...pronunciation is relatively immune to all but the most intensive forms-focused treatments" (1998, p. 43), implying that without specific and deliberate pronunciation lessons offered in the ESL classroom, proper pronunciation will continue to elude the adult second language learner. Yet the study of pronunciation has been and continues to be "...marginalized in the ESL classroom" (Derwing & Munro, 2005, p. 379) partly because English second language teachers "...avoid dealing with pronunciation skills" (Atli & Bergil, 2012, p. 3665) because many feel unprepared to teach these skills effectively. Thus, in most ESL classrooms, scant attention is

given to proper pronunciation skills during the course of the regular lesson. The focus is usually on reading, writing, and grammar. The constant and repetitive guidance that is required to instruct an adult in proper pronunciation is also impeded by such issues as class size, class frequency, manners, and cultural sensitivities (Derwing, Thomson, Foote, & Munro, 2012).

During the past twenty years, some researchers in second language acquisition have given attention to aiding the learner in attaining clearer pronunciation skills. For example, Gonzalez-Bueno (1997) included a short pronunciation practice period into all of her second language classes for one entire semester. While the focus of these pronunciation drills was limited to the occlusive sounds (p,t,k,b,d,g), Gonzalez-Bueno reported significant pronunciation improvement in those students who received the pronunciation practice as compared with a control group who did not receive any special pronunciation practice. These findings are encouraging for both students and educators alike and offer a strong suggestion to incorporate such pronunciation drills into all second language classrooms.

Atli and Bergil (2012) asked twenty English second language students to tell a story based on picture strips. The students' voices were recorded and analyzed for mispronunciations. Based on the findings, these twenty students received five weeks of specific pronunciation practice to address the mispronunciations. The pronunciation practice that these students received included an introduction to the Phonetic Alphabet and simple vowel sounds of the English language. After five weeks, the students were asked again to record a story based on the same picture strips and the two recordings were compared. The findings showed significantly improved pronunciation skills especially in the targeted mispronunciations.

Other researchers (Nicolaidis & Mattheoudakis, 2012; Piehl, 2011; Samuel, 2010) have explored additional methods of teaching pronunciation skills in the EFL/ESL classroom. Samuel

employs the use of what she calls "pronunciation pegs" to help adult students adopt the target pronunciation. Some of the pegs that Samuel describes include going through the motions to help students form their mouths properly to make the desired sound. For example, when working with Korean students who often struggle with the production of the /r/ sound, the instructor would explain that there are two steps in making /r/ sound: first, the lips are pursed (almost like a kiss or a gold fish); and, second, the tongue is down inside the mouth. The instructor could hold up two fingers while explaining and demonstrating this technique to the students. Then, when a student mispronounces the /r/ sound, the instructor would hold up two fingers to remind the students of the two steps required to produce the /r/ sound. As the students' learning progresses, a simple mouth gesture of pursing the lips may be all that is required when pronunciation correction is needed.

Second language phrases, when repeated frequently, create patterns in the mind (Piehl, 2011). These patterns can help the learner recreate the proper sound for clearer pronunciation skills. When repetitive phrases such as tongue twisters or voice exercises are used in conjunction with pronunciation pegs, research suggests that target pronunciation improvement will be seen. For example, while using "red leather, yellow leather" (a popular voice exercise in theater), the instructor can point to his/her lips that are pursed in a gold fish-like manner, when trying to elicit the /r/ sound from students. Repeating this (and other phrases) over and over will help create a pattern in the mind as to how to make the /r/ sound.

Nicolaidis and Mattheoudakis (2012) propose a teaching technique called PRO -VOC which integrates pronunciation skills with vocabulary acquisition. The PRO-VOC technique recommends that the introduction of new vocabulary word families be paired with one another. For example, to help in better pronunciation of the /i/ sound (long e as in "green"), several words



in the long e family can be introduced (tree, sheep, bean, etc.) and then paired with several words in another word family such as the /I/ sound (short i as in "pig"). This would produce some silly phrases that the students would have some fun with such as "green pig" or "pink tree" while simultaneously improving pronunciation and introducing new vocabulary. According to Nicolaidis and Mattheoudakis (2012), "This system can facilitate the teaching and learning of the pronunciation of new words, can provide opportunities for work on listening discrimination and production, and can progressively lead from activities at word level to activities at phrase level" (p. 309).

***Tongue twisters and voice exercises.*** Through the use of simple tongue twisters (used as pronunciation drills) to aid in proper pronunciation, adult students are able to increase intelligibility in their target language (Acheson & MacDonald, 2008; Corley, Brocklehurst, & Moat, 2011; Lord, 2008; Thirsk, & Solak, 2012). Chela-Flores suggests that second language learners be gradually introduced to the pronunciation aspect of language learning (2001). She further suggests that pronunciation instruction be presented in "meaningful units or tone groups rather than with isolated segments or words" (Chela -Flores, p. 85). Tongue twisters (and theater-voice exercises) are a great example of this. These simple and sometimes silly tongue twisters not only assist in better pronunciation skills, they also help present pronunciation learning in a meaningful units. Tongue twisters can help the student relax and gain confidence by the sheer nature of their simplicity. Nakazawa (2012) states that often, second language learners, especially university students, experience stress and anxiety due to their lack of adequate pronunciation skills. And, according to Krashen (1982), the five hypotheses of second language acquisition include the affective filter hypothesis which states that there are many factors that can obstruct second language acquisition. Some of these factors include negative emotional

responses which create a hindrance to second language acquisition. These negative emotions may include (but are not limited to) stress, lack of self-confidence, and even, at times, boredom. When the student realizes a little bit of the humor of tongue twisters, the student begins to relax and with repetition, before long, the tongue twisters are committed to memory and the student gains some overall confidence. Since confidence is bolstered, the student is more likely to attempt a conversation in the target language which in turn will produce better speaking skills.

As part of a second language pronunciation research project, Lord (2008) used tongue twisters as one method of pronunciation improvement technique. Lord reported favorable effects of dedicated pronunciation teaching. Among these favorable outcomes was improved student attitude toward second language learning, which, in turn, improved student motivation. Lord argued that "a strong sense of classroom community is associated with increased motivation as well as improved performance" (p. 367) indicating that through the use of simple pronunciation drills such as tongue twisters or voice exercises, classmates begin to form a closer bond. These classroom-community-like bonds are formed when the class participates in pronunciation activities that produce clearer pronunciation while the students are joining together as a team. For example, after a few weeks of repeated pronunciation drills (tongue twisters and voice exercises), the students will have memorized some of the drills. This can lead to some friendly competition that could include having two teams compete for the fastest time in a tongue twister contest thereby encouraging camaraderie and fostering a greater classroom community and a sense of belonging for even the quiet students.

### **Prosody and intonation**

Theater-like voice exercises (including tongue twisters) have been shown to improve vocal clarity and prosodic awareness in ESL and EFL students. Although the prosodic portions

of language acquisition are still considered difficult to teach, prosody can be improved through voice exercises (Thirsk & Solak, 2012). A group of English second language learners received theater-like voice training classes and achieved higher oral prosody ratings after only three weeks of voice training classes (Thirsk & Solak). These theater-like voice training classes helped reduce the stress of second language learning by permitting the students to step outside themselves, so to speak. In these classes, the students became actors, each playing a role. If a mistake was made, it was not really the student, but rather the character the student was portraying who made the mistake, thus relaxing the student. With stress reduction, the students felt less restricted, more confident, and more able to experiment with their own prosodic awareness in the target language, which yielded more natural speech production. Additionally, Thirsk and Solak reported that the use of drama scripts "from a well-known play, film, or poem" (2012, p. 345) allowed the students to experience more vocal freedom as they experimented with intonation using different emotions and sentence stress to convey these emotions.

**Phonemic and phonological awareness.** Nam (2006) suggests that the most effective treatment for pronunciation improvement is phonemic awareness training. Phonemic awareness is usually taught to children in language classes along with phonics. With adult learners, the initial language acquisition process must be displaced with that of the target language. Unlearning incorrect target language phonetic awareness is part of this training. While phonics uses sounds and letters, phonemic awareness involves only sounds thus allowing the learner to hear each individual sound (phone) that comprises a word rather than focusing on spelling and letters. Finally, Nam suggests the implementation of what he calls "modified phonics" which includes aspects of both phonics and phonemic awareness.

Additionally, by using simple tongue twisters (and other pronunciation drills) the students' phonological awareness of the target language begins to improve. Since the phonological arrangement of a language comprises the various features of the sound inventory including the spaces or pauses between sounds and words, the proper rhythm of the language (prosody) becomes highlighted. Accordingly, because "...pause length and pause placement are related to comprehensibility" (Kang, Rubin, & Pickering, 2010, p. 555), tongue twisters (and even simple poetry) are very useful tools in pronunciation teaching. Through the use of simple tongue twister rhymes (i.e. children's poetry), the students start to become more aware of the rhythm and cadence of the target language. As this prosodic awareness begins to grow for the students, the students will experience more self-confidence and become more comfortable with their own second language speaking abilities. When the student is more comfortable with their speaking abilities, much of the anxiety is relieved, creating a stress-free environment which can counter the "affective filter" (Krashen, 1982).

### **Motivation**

The prime motive for learning a second or foreign language is to "...communicate effectively in a meaningful context" according to Nam (2006, p. 231), who observes that most adult Korean EFL learners fear communicating with foreigners in English. Often, when trying to converse with a foreigner, Korean adults struggle with feelings of intimidation because they do not understand the foreigner's spoken English. The prospect of inadvertently insulting or failing to assist is so embarrassing that most adult Koreans are reluctant to even try. This fear can be a huge deterrent in second language acquisition because it is a negative emotional response which echoes Krashen's affective filter hypothesis (1985). Krashen notes that negative emotions can create a sort of blockade in the mind that can daunt second language acquisition. The only way to

overcome this is with the confidence wrought from the fires of energetic training.

Additionally, studies by Elliott (1995) and Smit and Dalton (1997) directly link more accurate pronunciation skills with student motivation. Elliot conducted a research study of university students studying Spanish and found that "attitude and individual concern for pronunciation" (1995, p. 356) was the variable that most related to proper pronunciation. While Smit and Dalton reiterated these findings by identifying that student foreign language pronunciation success was directly linked to motivation for proper pronunciation (1997). Additionally, although second language proficiency and aptitude may account for much of second language achievement, "motivational factors can override the aptitude effect" (Dornyei, 1998, p. 117).

With younger adult students needing to meet the requirement of their university that mandates two years of English conversation courses, researchers have found a demographic in which they can document a particular manifestation of andragogy: the students are driven by the need to graduate (Knowles, 2005). Older adult students are seldom motivated in this way. They tend to be more self-motivated and self-determined. In the latter case, the heutagogical concepts come in focus as researchers and educators witness more of the need-to-know variable. Further, from the perspective of heutagogy, researchers see the life- and problem-centered approach to learning that many older adults seem to bring with them (Knowles). The instructor can accommodate these needs through the use of various social media in addition to classroom time. A survey conducted by Barrera, Braley, and Slate (2012) notes that teachers see greater adult student advancement in both reading and writing when the teachers are more involved with their students through diverse forms of communication including newsletters, memos, and emails.

English second language classrooms are often filled with obstacles due to the multicultural backgrounds of the students (Derwing Munroe, Wiebe, 1998). Similarly, pronunciation instruction can be equally difficult. The TOEFL test (Test Of English as a Foreign Language), a widely accepted test of English language skills for non-native English speakers wishing to attend American universities, was first administered in 1964. It did not include a speaking portion until 2006 when the internet based test (IBT) was introduced. Consequently, speaking skills and pronunciation have taken a back seat to reading, writing, and listening. Moreover, because pronunciation is still considered the abandoned child of English language studies around the world (Gilbert, 1994), it is still being greatly ignored. However, clear pronunciation is beginning to gain recognition as an essential part of second language learning even while it is becoming more important on all the major English language tests such as TOEFL and TOEIC (Test of English for International Communication). With ample motivation, students become interested in learning proper pronunciation and two of the best motivators are the desire to be understood in the target language (Smit & Dalton, 2000) and the desire to perform well on internationally accepted tests of the English language (TOEFL and TOEIC, for example).

Another great motivator is accomplishment. If the students feel that they have done well in an exercise, they will continue to try (Wlodkowski, 2009). Through the daily repetition of simple pronunciation drills such as tongue twisters, students build their confidence and become motivated to speak more clearly (Isaacs, 2009). Repetition aids with memorization and memorization yields greater fluency. It is fitting to consider activities and games to encourage these repetitions. When some of these pronunciation drills have been (accidentally) memorized, the students experience a sense of accomplishment, a feeling that they have performed well, and thus, they will continue to try. Through such efforts as these pronunciation drills, educators are

helping students gain more confidence and feel more comfortable with the target language, all while having a little fun too.

Andragogy essentially is the process of motivating adults of all ages to learn (McKeown, 2010). In heutagogy the focus shifts to categorizing different age groups of adults and their learning styles (Knowles et al., 2005). Chlopek (2008) recommends that a good second language teacher begins each course by assessing the needs of the students and trying to provide a friendly and relaxed atmosphere that will encourage motivation. When adult learners of a second language are given the opportunity to self-reflect and produce a self-study plan, they become more motivated and perform better in the target language (Fengning, 2012). Included in the self-study plans are reasonable learning objectives, learning activities and resources, and instructor feedback, all of which yield increased motivation and accomplishment in second language skills. These self-study plans have proven to be strong motivators for all ages of adult second language students (Christophersen, Elstad, & Turmo, 2011). Research conducted by Mottern (2012) suggests that in order for positive motivation to occur, there needs to be a positive relationship between the adult second language learner and the instructor. Quite often these alliances become therapeutic for both the student and the teacher and serve as a motivational force by which the student becomes inspired to seek better understanding of the target language, thus promoting learning in the target language.

A recent study on heutagogy and lifelong learning showed that as the adult student maturity level increased, so did the determination for second language acquisition (Blaschke, 2012), and, as the determination for second language acquisition increased, so did the success of the student (heutagogy). These findings counter the critical period hypothesis (CPH). Blaschke notes that the more instructor-control that is exerted in the adult second language classroom, the

less interested the learners become. Therefore, it is recommended that adult second language instructors encourage their students to be involved in their own self-directed lesson planning.

A positive classroom environment that includes comfortable surroundings (which may incorporate samples of the students' work on display) is essential to motivate adult students of all ages (Terrell, 2012). When the students can see their work on display, either on the walls of a traditional classroom or posted on a blog site of an online classroom, they feel a sense of pride which yields motivation. Since the move from Web 1.0 to 2.0 and 3.0 we have witnessed a giant leap in the way adult students interact with their peers. Terrell contends that the adult classroom environment is a rapidly changing landscape that is cultivated by a move toward online collaboration. This collaboration is a huge motivating force that promotes adult second language learning.

In heutagogy, it is noted that older adult students are usually more driven by a need-to-know. This need-to-know can be a catalyst for motivation if harnessed by the instructor through assessing the individual student needs. When second language students take on responsibility for their own learning (usually the case with older, self-determined adult students), they become highly motivated, they study very hard, and they succeed in second language acquisition. On the other hand, younger adult students quite often are only trying to satisfy the requirement of their university or school, and therefore lose interest quickly and forget even more quickly. With these younger adult students, motivation takes on a whole new role, the teacher must become very innovative in creating new and different tasks to help motivate the students. Contextualized Teaching and Learning (CTL) that encourages teachers to connect subject material to real life situations is another motivational technique that can be used in the second language classroom



(Huang, Tindall, & Nisbet, 2011). Using thematic lesson plans that are appealing to the students, and possibly even selected by the students, will nurture greater motivation to complete the tasks.

## **Conclusion**

This literature review has examined various aspects of adult second language acquisition including the critical period hypothesis (CPH) which states that adults have little chance of learning a second language and an even lesser chance of acquiring native-like pronunciation skills in the target language. The review of the literature presented herein offers both sides of the CPH debate in hopes of spotlighting the need for further attention in the neglected area of adult second language pronunciation. Additionally, some highlights of the teaching and learning theories of andragogy and heutagogy were offered with specific examples of the applications to reading, writing, and speaking skills in the second (and foreign) language classroom. The use of tongue twisters (and voice exercises) to help with second language speaking and pronunciation skills was also examined. Several examples were presented to show how recently researchers (Lord, 2008; Nicolaidis & Mattheoudakis, 2012; Thirsk & Solak, 2012) have used tongue twisters successfully to aid in proper pronunciation in their respective English second language classes. Perhaps for the first time, academia is beginning to realize the simplicity yet result-producing nature of these tongue twisters as pronunciation tools.

The reading and writing section of this literature review notes that the latest trend in adult second language education is toward relevance, having the teacher make a connection between the reading and writing (and speaking) with students' real-life experiences (Malcolm, 2012). Also, in the reading and writing section, vocabulary acquisition was surveyed. In age-specific vocabulary acquisition, some of the old ways (mass repetitions) are not the most effective ways.

Here, too, new findings suggest that students respond well to vocabulary choices that are linked to the practical world. Pronunciation skills were examined also, and although generally ignored, it is imperative that closer attention be given to this marginalized field. Finally, motivational forces in adult second language acquisition were perused to discover that interest levels must be maintained in order for adult second language learning to occur. Higher interest levels help generate higher motivation at all age levels. These concepts have all been academically reviewed in an attempt to propose that ESL and EFL studies around the world would benefit from even the most limited dedicated pronunciation portions added to and included in each class.

Although interest in adult second language learning has certainly experienced a rise in recent years, not enough instructional research has been devoted to this interesting educational challenge. Moreover, even less research has been conducted in the field of pronunciation and speaking skills. The research surveyed here establishes a need to revisit adult second language educational practices. Further studies can surely yield higher benefits for the adult learner. Additionally, future research is needed to discover more about how educators may better serve the adult student population in the area of second language acquisition and particularly so for pronunciation skills.

## **Chapter Three**

### **Methods**

#### **Introduction**

The purpose of this research was to discover if there was a significant difference in intelligibility levels between the treatment group and the control group before and after the research period (during one semester). This research project took place at a university in South Korea (Woosong University, Daejeon, South Korea). I used a quasi-experimental design similar to previous research conducted by Derwing, Munro, and Wiebe (1998) and Munro and Derwing (2008). In the previous studies, English second language learners' pronunciation of English words and sentences was recorded and analyzed. In 1998, Derwing, et al. published a research study where ESL students were asked to say simple statements that were spoken by a native North American English speaker. These simple statements were recorded at the beginning and the end of the research period. These recordings were then listen to and analyzed by native North American English speakers. The before and after results were compared and contrasted. In a longitudinal study of vowel production in 2008, Munro and Derwing made several recordings of the ESL student participants at two months intervals. The recordings contained ten, single syllable, CVC (consonant-vowel-consonant) words. These recordings were analyzed for intelligibility specifically with vowel sounds.

For this research project, I recorded volunteer student participants' voices as they read a prepared specific set of forty (40) single syllable (c/v/c) words and their minimal pairs. These minimal pairs had been carefully selected to represent the known difficulty of the student participants with the production and differentiation of the /r/ and /l/, and the /p/ and /f/ sounds. Also, these minimal pairs were selected to reflect words that are fairly or very commonly used in

ordinary English conversational speech. A phoneme (a single sound) with a high degree of usage known as "functional load" (FL) "...is more likely to be important in distinguishing between words" (Foote, Holtby, & Derwing, 2011, p.5).

The recordings were evaluated by volunteer native English speaking teachers. These recordings occurred twice during the research period; once at the beginning and once at the end. During the interim period, the control group received no specific pronunciation instruction; while the treatment group received specific pronunciation instruction according to my own design (based on ten years of EFL teaching experience in Korea) and in agreement with the volunteer teacher participants.

### **Setting**

This quasi-experiment in English pronunciation skills was conducted at Woosong University located in Daejeon, South Korea. Daejeon is South Korea's fifth largest city with a population of approximately one million five hundred thousand people. It is centrally located in the heart of South Korea and, therefore serves as a transportation hub and a crossroads for many transport routes. As such, Daejeon is a popular tourist destination that attracts both Koreans and foreigners alike, and tourism is an important part of the local economy which demands at least some English speaking skills.

Woosong University is a specialized, four-year university that was originally established in 1954 as Woosong Educational Foundation. In 1995, the school officially changed its name to Woosong University offering six different schools of undergraduate studies including: School of Design and Information; School of Health and Welfare; School of International Studies; School of Railroad Transportation; School of Tourism and Culinary Management; and School of Business SolBridge (B.B.A.). The Korean Ministry of Education, in 2001, awarded Woosong

University as an authorized facilitator for both IT Education and Information Correspondence and International IT Information. Today, Woosong University boasts several international partnership programs as well as summer cultural enrichment camps both of which require more than a basic knowledge of English. Additionally, Woosong University has an undergraduate student population of over six thousand including over one-thousand-five-hundred freshmen and over two hundred professors, both native and foreign (2016, Woosong University website).

### **The research**

In a quiet area of my faculty office located on the campus of Woosong University, the student participants were asked to record four sets of ten, one syllable words. The minimal pairs, which differed by one single phoneme (sound), were carefully selected for their frequency and use in common conversational English (Foote, Holtby, & Derwing, 2011), and included such words as led/red and lead/read; rip/ lip; lock/ rock; light/ right; and/ or late/ rate (see Appendix A). These recordings occurred twice during the course of the semester: once at the beginning of the research period and once at the end of the research period. The recordings were done on a Toshiba Satellite laptop computer using a PA Cyber Acoustics headset with a microphone attached and were recorded using NCH WavePad technology to insure authentic voice reproduction. Additionally, those specific teacher participants who were the "raters" received these recordings as an MP3 file sent via email. Because MP3 is a common audio format for audio storage, transfer, and playback it has achieved a *de facto* standard for digital audio files for storage, transfer, and playback, and, as such, MP3 is reliable for authentic audio reproduction (Rappaport, 2000). These recordings were downloaded and listened to by the raters at their own convenience and with their own equipment. The raters listened to these recordings and tried to distinguish what word was being spoken. On an "evaluation sheet" each rater rated each spoken

word as one of three options: the correct word, the correct word's minimal pair, or other (see Appendix B).

### **Participants and Sampling Strategy**

This research was voluntary, anonymous, and confidential. Informed, bi-lingual (Korean/English) written consent forms (see Appendix C) were obtained from each participant prior to the start of this quasi-experiment in pronunciation skills. I was originally seeking between twenty and forty volunteer student participants, and, to do this, I visited the classrooms of the teacher participants (who had agreed to be part of either the control or the treatment group) to try to recruit the twenty to forty volunteer student participants. Since I was unable to recruit that number of volunteer student participants from these original classes, I sought additional native North American English speaking teachers to request that they participate in this research study. After enlisting the help of additional native North American English speaking teachers, I was able to recruit a total of thirty-four student participants: twenty volunteer student participants in the treatment group, and fourteen volunteer student participants in the control group. The volunteer student participants for the treatment group were all from classes whose teachers had volunteered to dedicate a portion of each class to the prescribed pronunciation drills that I provided to them. The volunteer student participants for the control group were all from classes whose teachers had volunteered and agreed to do nothing different for pronunciation training. However, some of the student participants did not return for the posttest thus netting the total volunteer student participants to thirty-one: seventeen volunteer student participants in the treatment group and fourteen volunteer student participants in the control group.

For the purpose of this research, it was important that the teacher participants all be native North American English speakers so that all the volunteer student participants heard

English spoken approximately the same, with a native North American accent. The student participants ranged in age from eighteen to twenty-five years old (by American standards) and included all class levels from freshman to seniors at Woosong University in South Korea. Since Woosong University does not utilize level placement tests for the English classes, the student participants' English skill levels varied. The teacher participants (for the control group, the treatment group, and the raters) were all native North American English speakers and therefore, established a baseline of approximately the same sound of English (North American accent) for all aspects of this study including volunteer student participants' listening, reading, and speaking; and a baseline of approximately the same sound of English for the raters listening/hearing. Additionally, all of the teacher participants were university instructors who had earned a minimum of a Masters' Degree in their respective fields and countries, America or Canada, (as required by the South Korean Ministry of Education to teach at the university level). And all the teacher participants had at least five years of university teaching experience here in South Korea, although none had any special training in pronunciation skills.

The student participants were non-randomly selected because the student participant selection was limited to only the classes instructed by those teachers who had volunteered for this quasi-experiment. The six classes from which the student participants were non-randomly selected included four of the control group and two of the treatment group. Additionally, I had been seeking a minimum of four native North American English speaking professors who are not teaching either the control group or the treatment group, to act as "raters" who would listen to and score for intelligibility the recordings of the student participants. The raters had no other participation in this research and were pre-tested (through the use of a pilot test) for inter-rater reliability prior to the beginning of this quasi-experiment.

Some of the limitations involved with this sampling strategy include the fact that all of the student participants were students at a university in South Korea. Also, only students from the classes whose instructors were native North American English speakers and who had volunteered to be part of this quasi-experiment were allowed to participate.

### **Inter-rater reliability**

This research requires human raters' judgments, and, as such, reliability was an important issue. Because "reliability is in fact a prerequisite to validity in performance assessment" (Liao, 2004), a test for inter-rater reliability was conducted prior to the launch of this research study. The test for inter-rater reliability, as mentioned above, was based on percent of absolute agreement (Graham, Milanowski, & Miller, 2012) and included a pilot test of a small group of students with varying English skills. Since it was essential to examine if the observations of the raters were consistent or not, I calculated the number of times each of the raters agreed on each individual rating of the forty words in the words list and then divide by the total number of ratings to arrive at a percentage of absolute agreement. Similar to the actual quasi-experiments conducted by Munro and Derwing (2008), minimal pairs were recorded by a small group of students and the raters scored this small group of students for intelligibility. The raters' scores were compared to assure that all the raters listened and comprehended at approximately the same rate as each other. The minimal acceptable percentage of absolute agreement was 75% agreement amongst the raters because "values of 75% to 90% demonstrate an acceptable level of agreement" (Graham, Milanowski, & Miller, 2012). Additionally, according to Stemler (2004), a strong guideline for establishing inter-rater reliability is that it should be "70% or greater." Because 75% agreement between the raters was not met on the pilot study, one rater who rated dramatically different from the other raters was thanked and dismissed. The remaining three



raters were counseled in rating techniques in an attempt to achieve a more acceptable percent agreement. After counseling, the remaining three raters were asked to listen to and rate the recordings a second time. Additionally, after the second listening, I determined that only two of the raters listened at approximately the same rate. Therefore, in order to maintain a minimum of 75% agreement amongst the raters, I thanked and dismissed one more rater, thus leaving two raters who listened at approximately the same rate.

### **Research Design**

Qualitative research is generally used to gain a better understanding of underlying motivations through the use of descriptive accounts and observations. The intent of qualitative research is to give rich descriptions of the experiences of the participants in a narrative format that cannot be reduced to mere numbers and therefore, in qualitative research, the words become the data (Creswell, 2012). Conversely, quantitative research is based on the analysis of numerical information that can be applied from the sample group to the general population (Nardi, 2002). Since the purpose of this research was to discover if there is a statistically significant difference between two groups, and if so, to numerically calculate (percentage) that difference, a quantitative research design was appropriate.

This research examined before and after pronunciation skills of adult EFL students. Since paired samples t-test can be effectively used to establish whether or not there is a statistically significant difference between the averages of the same element conducted under two dissimilar conditions (Easton and McColl, The Statistics Glossary), a paired samples t-test was indicated and utilized for comparing and analyzing the results of this research. The paired sample t-test was based on the differences between the before and after values. The purpose of this quasi-experiment was to discover if there is a statistically significant difference in intelligibility levels

between the treatment group and the control group using a quasi-experimental design similar to previous research conducted by Munro and Derwing (2008).

The treatment group received a dedicated pronunciation learning program that consisted of ten to fifteen minutes per seventy-five minute class, two classes per week, of specific English pronunciation drills (drills explained below). For the purpose of this research, the pronunciation drills as explained below, (see Appendix D) were given to the teacher participants in advance with detailed instructions (see Appendix E) regarding the order in which the drills were to be practiced and how much time was to be spent on each drill. The control group was given no special pronunciation instructions during the regular EFL classes of seventy-five minutes per class, two classes per week.

**The independent variable.** The independent variable in this study was the use of dedicated pronunciation drills (drills explained below, also see Appendix D). Since the goal of this study was to ascertain whether or not even a brief exposure to the independent variable (dedicated pronunciation drills) would have any effect on the intelligibility levels of the student participants, the descriptive statistics that have been reported herein include the measures of central tendency and the measures of speed. The frequency distribution of the measures of central tendency has been described using the mode, median, and mean. The mode was used so that I could identify the value that appears most often in this data. Both the median (the middle point) and the mean (the average) were used to show the averages within the data which will indicate changes in the intelligibility levels, if any. The measures of speed were summarized using range, absolute deviation, variance, and standard deviation in order to better understand if the independent variable (dedicated pronunciation drills) had an effect on the student participants' intelligibility levels.

***The pronunciation drills.*** The pronunciation drills consisted of the tongue twisters and voice exercises as presented in Appendix D. These tongue twisters and voice exercises were designed so that they would not be used in numerical order so that the drills could be a bit of a surprise to the students. They were also designed to start with what I have perceived to be one of the most difficult sounds for Korean students to reproduce distinctively: the /r/ and /l/ sound. These drills took up to 10 minutes per class and started with some very basic sounds which included up to three tongue twisters for the first few classes. As students became more familiar with these initial tongue twisters and voice exercises, the teacher then proceeded to more difficult tongue twisters, incorporating more difficult sounds. Eventually after a few weeks of tongue twisters, the teacher then moved on to some more advanced voice exercises commonly used in theater. Depending on the English speaking skills of the individual class, these first few weeks on tongue twister exercises might be as few as two weeks or as long as four or five weeks. By then some of the students had already memorized some of the tongue twisters. This helped build confidence and camaraderie within the classroom because more and more students gained the ability to say these English words with confidence and without much forethought. After enough accidental memorization had occurred, the teachers were instructed to continue on and include some friendly competition in the way of a tongue twister contest.

The pronunciation drills were designed by me, based on ten plus years of EFL/ESL teaching experience and observation in South Korea and America, to focus on specific pronunciation problem areas for Korean EFL learners. For example, because the Korean language (Hangul) does not contain a clear distinction between the /r/ and /l/ sounds in its sound inventory, students often have difficulty with the correct pronunciation of the /r/ and /l/ sounds. Pronunciation drills that included special attention to the proper articulation of these sounds were

included in the pronunciation drills. Also, the teachers were instructed as to how to demonstrate to students the correct mouth and tongue positions to produce these sounds in an effort to elicit clearer enunciation and articulation (See Appendix E).

Other areas that the dedicated pronunciation drills focused on was intonation to aid in intelligibility by using patterns of rhythm and rhyme presented in a somewhat comedic format to help the students feel more comfortable with their English speaking skills. The dedicated pronunciation drills were also designed to offer opportunities for the teachers to present additional linguistic concepts such as reduction, a common occurrence in English where the sound is not like it is spelled (for example "want to" sounds like /wanna/). This aided in students' overall EFL learning experience and contributed to the students' improved intelligibility in English.

**Word lists.** Prior to the start of the treatment, both the treatment group and the control group recorded four sets of ten, single syllable words each (minimal pairs) (see Appendix A). These recordings were scored for intelligibility by native North American English speakers. After the treatment period, both groups recorded the same four sets of ten, single syllable words each (minimal pairs) and the raters, once again, scored these recordings for intelligibility. The two rating scores were then analyzed and compared.

The word lists were developed using information gleaned from previous research studies (Derwing, et al., 1998; Nations, 2001; et al.) and through my own experiences. The minimal pairs were deliberately placed on separate lists to insure individual intelligibility of phonemes and to avoid any possible confusion by the student participants. For example, because there is no clear distinction between the /l/ and the /r/ sound in the Korean language sound inventory, the words "led" and "red" were deliberately placed on different lists so that student participants had a

better chance of articulating the correct sound and the raters had a better chance of hearing the true sound that was articulated.

### **Data Collection and Analytical Procedures**

Both at the beginning and at the end of this quasi-experiment of pronunciation skills, the student participants' intelligibility was assessed by the native North American English speaking "raters." These raters were asked to evaluate the student participants' recordings using a three-point scale: the correct word, the correct word's minimal pair, or other (see Appendix B). The results of the assessments were compared and analyzed.

Prior to the data analysis, it was important to organize the data that had been collected. Before entering any data into a computer, all student participants were assigned a unique identification code to help ensure the privacy of the student participants. Additionally, all data was entered numerically so that it was able to be processed and analyzed by a computer. I used an Excel spreadsheet to initiate the organization of the data in an electronic format. On a separate spreadsheet, I listed the students' names and I D numbers and a secret code number. On another spreadsheet I enumerated only the secret code numbers and the results of the recordings. I had a colleague verify all the data entered to further assure accuracy. Once all the data was entered numerically into Excel spreadsheets, I input the numerical data into SPSS (Statistical Package for Social Science), an IBM software package widely used and recognized for statistical analysis.

Using SPSS software, a test of the statistical significance was performed on the data that was collected in order to ascertain if the null hypothesis had been rejected. The t-test was appropriate for this analysis because a t-test is a test of the statistical hypothesis that may be utilized to decide if two sets of data are significantly different. Additionally, because this study aimed to yield causal-comparative data, the mean scores from each of the two groups were

compared, further indicating the suitability of the t-test (Gall, Borg, & Gall, 1996). More specifically, a paired samples t-test was used to analyze the data because usually paired samples t-tests are comprised of matching pairs or pairs of units that have been tested twice (David & Gunnink, 1997). In this case, the two sets of data are somewhat matching in that both data sets were collected from the same group of students at a specific university (Woosong University, South Korea). Additionally, both sets of data were collected twice, once at the beginning of the research study and once at the end, further necessitating the use of a paired samples t-test. The average semester at Woosong University is fifteen to sixteen weeks long. Accordingly, this research period was approximately twelve weeks long: initiating shortly after the semester began and finishing one week prior to final exams.

**The dependent variable.** The dependent variable in this study was the ineligibility level of the student participants' spoken English. The intelligibility level of the student participants' spoken English was determined by their pronunciation of forty single syllable words as rated by native North American English speakers. Further, the analysis of the dependent variable (intelligibility level) data provided information regarding the effective use of tongue twisters (and other pronunciation drills), with even a minimal exposure in ESL/ EFL classrooms.

**Threats to internal validity.** For the purpose of this study, I considered the twelve threats to internal validity in educational research as presented by Gall, Borg, and Gall (1996) in *Educational Research: An Introduction*. These threats include: (a) history, (b) maturation, (c) testing, (d) instrumentation, (e) statistical regression, (f) differential selection, (g) experimental mortality, (h) selection-maturation interaction, (i) experimental treatment diffusion, (j) compensatory rivalry by the control group, (k) compensatory equalization of treatments, and (l)

resentful demoralization of the control group (Gall, Borg, & Gall, 1996). The following is a list of threats to internal validity and how I was able to address each.

**1. and 2. History and maturation.** Since this study took place during less than only one semester, the likelihood of other outside events (history and maturation) influencing this experiment was minimal. Some examples of these possible threats to the internal validity of this study included such things as the aging or maturing of the students at different paces. Both were unlikely because all the students were within the same age group (19-25) and all of them shared similar demographics. Also, all the student participants were enrolled at the same university. Further, it is not common for the average university student in South Korea to independently seek outside help with pronunciation skills in English.

**3. Testing.** The testing material was limited to only forty, single syllable words, and the student participants were not informed that they will be asked to repeat the same forty, single syllable words during the posttest. Therefore, it was unlikely that this would have any effect on the student participants simply due to the students' experience with the pretest.

**4. Instrumentation.** Many raters tend to rate post-test higher than the pretest simply because there is an expectation of improvement. In this study, the raters were asked to rate both the pretest and the posttest at same time. Also, to further guard the internal validity of the instrumentation, the raters were not told which recording was the pretest and which was the posttest.

**5. Statistical regression.** When using a before-and-after style testing, it is always possible for statistical regression to occur. In these cases, statistical regression may account for some of the observed changes, if any. Since by definition, statistical regression is the tendency for participants whose scores are on the extreme ends of the pretest to score nearer to the mean on

the posttest, the question of internal validity is ever present. To partially control for the possibility of statistical regression in this study, the Pronunciation Attitude Inventory (PAI) survey (see Appendix F) was administered to all student participants prior to the pretest. This survey helped determine student participants' attitude towards pronunciation skills and pronunciation learning. Understanding student participants' general attitude towards pronunciation, whether negative or positive, helped me quantify whether or not any observed differences in intelligibility were due to attitude and motivation rather than merely due to the treatment. Additionally, the student participants were not told what their score was on either the pre-test or the post-test, thereby making statistical regression unlikely to be reflected in the outcome of this research study.

**6. Differential selection.** It stands to reason that when the control group has different characteristics than the treatment group, results will be skewed. Differential selection is defined as selecting participants for the two groups (control and treatment) that have different characteristics (Gall, Borg & Gall, 1996). To guard against this threat to internal validity in this study, both control and treatment groups shared very specific commonalities. All student participants were of the same ethnic background (Korean), the same age range (19 -25), attended the same university, and were, at the time of the experiment, residing in the same general geographic vicinity (Daejeon, South Korea area). While this presented a challenge to the generalizability of the findings, the threat of differential selection was reduced.

**7. Experimental mortality.** Every social experiment is affected by an attrition rate. Participants in a research study drop out of the study for many reasons. In order to reduce the risk of this threat, I attempted to make both groups in this study equally desirable by offering a small stipend to all of the student participants. This stipend was awarded only after the posttest



recordings were completed in an effort to ensure that all the participants return for the posttest. Further, the time commitment for participants was kept as brief as possible (about two, ten minutes sessions). However, even with these guards against experimental mortality in place, three students failed to return for the post-test.

**8. *Selection-maturation interaction.*** Selection-maturation interaction becomes a threat to internal validity when different growth rates, both physical and psychological, are observed during the tests period. This was unlikely to be a serious threat in this study because all of the students were approximately the same age (19 -25), and all were attending the same university. Additionally, this entire study took place during less than one semester, which further reduced the threat of selection-maturation interaction. Selection-maturation interaction is more of a threat with younger participants wherein two or three months can present major growth changes, both physical and psychological. Also, the time span of this study was short (less than one semester), further reducing this threat (Gall, Borg & Gall, 1996). On a university campus, maturity level dilemma is seldom problematic, if present at all (edfundwest.org, 2015).

**9. *Experimental treatment diffusion.*** Sometimes when using a treatment and control group, the treatment is perceived as extremely desirable. In these cases, sometimes the control group will experience a sort of jealousy and try to glean information or possibly request the same treatment as the treatment group. However, due to the nature of this study, that is, merely focused on English pronunciation skills, it was unlikely that the control group experienced any of these negative emotions that would have made them want to join the treatment group instead. Further, because the control group participants were from different classes with different instructors, the control group participants were not aware of the treatment that the treatment group received (pronunciation drills) and vice versa. Therefore, it was all the less likely that any

experimental treatment diffusion would occur. Additionally, since I attempted to make both the control and treatment groups equally desirable by offering the exact same stipend to all students as compensation, experimental treatment diffusion became even less of a threat.

**10. *Compensatory rivalry by the control group.*** Sometimes when using a treatment and control group, the control group feels a sort of competition with the treatment group. When this occurs, the possibility of the control group outperforming on the post-test exists because of this feeling of competition. Again, to guard against compensatory rivalry by the control group, participation in either group was presented as equally desirable as possible partially due to the equal stipend offered to both groups. Additionally, the student participants were not informed which group they are a part of, nor were they informed of their scores on neither the pre-test nor the post-test thus further reducing the risk of compensatory rivalry by the control group.

Although there is a basic curriculum that must be followed, at this particular university the professors are able to design their own lessons within a certain framework. This allows for discretionary time within each lesson for the professors' choice of teaching inclusions. For the purpose of this research study, those professors who agreed to be part of the treatment group by including a dedicated pronunciation drills portion in each class utilized only a small portion of time (ten to fifteen minutes of each class). Therefore, the treatment group did not experience any significant difference in work load. Conversely, those professors who agreed to be part of the control group by agreeing to not do anything different in their English conversation classes than they normally would (specifically, they agreed not to include any special pronunciation lessons) used the same amount of time on other activities as they had planned. Therefore, the control group did not experience any significant difference in work load either.

Finally, it was my hope that both groups were perceived as equally desirable and that the control group would not feel any kind of competition with the treatment group (and vice versa) because both groups received the exact same monetary compensation.

**11. *Compensatory equalization of treatments.*** Compensatory equalization of treatments is an extraneous variable that can occur when the groups receive a treatment that may include goods or services. Since this research study offered only a small stipend in the exact same amount to both control and treatment groups as compensation, this can be viewed as general compensation. General compensation also reduced the threat of compensatory equalization of treatments. Additionally, the same amount of time was required for all participants to visit my office and make voice recordings of forty, one syllable words twice during the research period. Furthermore, no other work was required of any of the student participants beyond their normal participation in their English conversation classes.

**12. *Resentful demoralization of the control group.*** Resentful demoralization of the control group sometimes becomes an issue in research studies when the control group feels that the treatment group is receiving better treatment or, on the other hand, is being asked to work harder. Participants may become angry and uncooperative. However, this threat was minimized because this experiment was designed to help the students relax more and reduce some of the stress associated with pronunciation skills learning.

**External validity.** The external validity of this research study was limited by the fact that all students were students at a university in South Korea. Therefore, the results of these findings may only be applicable to a small target population including other Koreans, Japanese, and Chinese because they share the same or similar sound inventory in their native language. Additionally, all the student participants were approximately in the same age group (19-25)

which could further limit the findings of this study to a target population within the same or similar age group.

### **Research Ethics**

I conducted a quasi-experimental research study in an ethical manner as prescribed by the George Fox University College of Education and in compliance with all of the university's policies and procedures including the Human Subjects Research Committee. This quasi-experiment involved human subjects and, as such, required the approval of the George Fox University Internal Review Board (IRB) and the George Fox University Human Subjects Research Committee (HSRC). Accordingly, this approval was sought and granted (see Appendix I).

**Informed consent.** All the details of this quasi-experiment were explained to student participants in both Korean and English orally and in writing. Written bilingual (Korean/English) Informed Consent Forms (see Appendix C) were obtained from all student participants prior to the beginning of the research study. Informed Consent Forms were also obtained from all the teacher participants as well. The treatment group teachers signed an agreement stating that they would follow the treatment group instructions and dedicate ten to fifteen minutes per class, two classes per week during regular semester class times to pronunciation drills (see Appendix F). The teacher participants in the control group signed an agreement stating that they would not give any specific pronunciation lessons during the course of the semester (see Appendix G). The teacher participants who were raters signed an agreement stating that they would listen to and rate the individual student participants in an unbiased manner (see Appendix H).

**Anonymity and confidentiality.** In order to preserve the anonymity and confidentiality of the student participants, each student participant was assigned a unique numerical code. This

numerical code was used in lieu of the student participants' names or university student identification numbers. Additionally, every effort was made to ensure that none of the student participants were in a class that any of the raters were teaching.

**Security.** All data used for this study and all forms, evaluation sheets, and any other documents that may have been obtained during the course of this quasi-experimental research study have been and will continue to be stored in a locked file box in my home in South Korea for two years, and will then be destroyed. The confidentiality of all participants was and will continue to be maintained.

### **Role of the Researcher**

I am a doctoral student in the EdD program at George Fox University, and a professor at a university in South Korea (Woosong University, the site of this research study) who teaches English conversation classes and has been a strong proponent of speaking and pronunciation skills in the EFL/ESL classroom. Additionally, I am an avid supporter and participant in the Annual Woosong University English Speech Contest and the organizer for the English Drama club at Woosong University. As such, I had and still have a vested interest in the outcome of this research. For this quasi-experimental research study, my primary role was to recruit volunteer student and teacher participants, oversee the data collection (voice recordings of the student participants and the ratings), and to coordinate and analyze the ratings. Due to my professional role, it was important for me to have minimal interactions with the volunteer student participants to ensure against any implication of discrimination or bias in this research study.

### **Potential Contributions of the Research**

The dearth of research in the field of English second language pronunciation skills demands further investigation into this somewhat neglected area of second language acquisition.

I was curious to discover if something as simple as a few minutes per class of voice exercises (pronunciation drills) would be successful in helping adult EFL students achieve clearer pronunciation thereby aiding adult students to communicate more effectively in the target language. Moreover, the results of this research study helped me, as an educator, better assist my students in their quest for clearer pronunciation in their target language, English.

This research has added to the growing knowledge base and helped identify whether or not simple pronunciation drills had an impact on overall speaking skills. Additionally, the findings from this study added to the awareness of helpful ways to teach pronunciation skills to adult ESL/EFL learners, and provided much needed insight for teachers regarding the development of effective pronunciation skills instruction.

## **Chapter 4**

### **Results**

This chapter examines whether or not there is a relationship between English intelligibility levels of EFL university students in South Korea who received dedicated pronunciation training and those who did not. I conducted a quasi-experiment in pronunciation skills during the course of one semester. Upon completion of the experiment, I compared the before and after intelligibility test results for two groups: the treatment group (those who received dedicated pronunciation drills) and the control group (those who did not) by using IBM SPSS software. The results are discussed herein.

### **Measures**

In order to initiate the exploration process of discovering what variables may affect South Korean university EFL students' English intelligibility, several questions were identified. First, is there a significant difference in intelligibility between a group utilizing a dedicated pronunciation-learning program (treatment group) and a group who did not (control group)? Also, can short-term exposure to pronunciation drills significantly improve target pronunciation and intelligibility in adult second language learners? Since this study was conducted over a short period of time, within one semester, this question became important to identify and observe. And, finally, can the use of simple tongue twisters and voice exercises suffice as pronunciation drills to significantly improve pronunciation skills (intelligibility) in adult second language learners? Here, again, it was necessary to examine if these simple tongue twisters and voice exercises could help produce more intelligible English language skills in South Korean EFL university students.

## Correlation

I used IBM SPSS software to run paired samples correlation (Table1). At the  $p = .05$  level, significant correlations were discovered between both the control group pre- and post-tests ( $p = .032$ ) and the treatment group pre- and post-tests ( $p = .001$ ) (Table 1). Therefore, both groups did change over the course of this study, while the treatment group changed a bit more. This suggests that even short term-exposure to pronunciation drills may have a positive impact on intelligibility in the target language, English.

**Table 1.**

*Paired Samples Correlations*

	N	Correlation	Sig.
Pair 1 AvgPreControl & AvgPostControl	14	.574	.032
Pair 2 AvgPreTreat & AvgPostTreat	15	.774	.001

## Findings

In order to begin, I ran a Descriptive Statistics comparison produced by using IBM SPSS software (Table 2). This table shows the total number of participants for each category (control group  $N = 14$ ; treatment group  $N=15$ ), the minimum and maximum for each score, the Mean, and Standard Deviation.



**Table 2.**

*Descriptive Statistics for Control and Treatment groups, Pre-test and Post-test intelligibility scores.*

	<u>N</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Std. Deviation</u>
Control Pre Test	14	.60	.93	.80	.082
Control Post Test	14	.73	.90	.82	.058
Treatment Pre Test	15	.34	.98	.71	.165
Treatment Post Test	15	.56	.96	.80	.124

*Note:* Possible minimum and maximum scores were from 0 -100.

Next, using a sample of 29 Woosong University undergraduate students (control group N= 14, treatment group N = 15), a paired-samples t-test was conducted to compare pre- and post-test intelligibility levels of the control group and the treatment group (Table 3).

**Table 3.**

*Paired samples t-test*

	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	Interval of the		t	df	Sig. (2-tailed)
				Lower	Upper			
Control Pre-post	-.02143	.06792	.01815	-.06064	.01779	-1.180	13	.259
Treatment Pre-post	-.09200	.10476	.02705	-.15001	-.03399	-3.401	14	.004

The paired samples t-test and the paired samples statistics (Table 4) both show that there was no statistically significant difference in intelligibility levels between control group pre-test (M=.80, SD= .082) and post-test (M= .82, SD= .058);  $t(13) = -1.180$ ,  $p = .259$ . Considerations of

the ES (Effect Size) were omitted due to small sample size. These results suggest that there is little to no correlation between the control group per- and post-test which further suggests that the small amount of improved intelligibility in the control group may be accounted for by chance but there was a small amount of improved intelligibility nonetheless. While the treatment group showed a statistically significant difference in intelligibility levels between the pre-test ( $M = .71$ ,  $SD = .165$ ), and post-test ( $M = .80$ ,  $SD = .124$ );  $t(14) = -3.401$ ,  $p = .004$ . Again, considerations of the ES (Effect Size) were omitted due to the small sample size. These results suggest that the improved intelligibility levels of the treatment group are meaningfully associated with the treatment such that those who received the dedicated pronunciation drills showed some improvement. The small sample size limits our ability to make any stronger statements about the significance of the impact of the treatment. In other words, both control and treatment groups improved over time, but the treatment group improved a bit more.

**Table 4.**

*Paired Samples Statistics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	AvgPreControl	.7993	14	.08176	.02185
	AvgPostControl	.8207	14	.05837	.01560
Pair 2	AvgPreTreat	.7100	15	.16527	.04267
	AvgPostTreat	.8020	15	.12353	.03190

Further, in the paired samples statistics (Table 4) there was a noticeable improvement in the mean scores of the post-test intelligibility levels of the treat group (from .71 to .80) as compared with the control group (from .80 to .82). These results suggest that students who received dedicated pronunciation drills achieved improved intelligibility in the target language.

## **Conclusion**

There is reason to believe that some significant change took place and there is some evidence that a dedicated pronunciation portion of an English language learning program may be helpful in improving the second language learners' intelligibility in the target language. Although this study was conducted over a short period of time, within one semester, and the treatment group only received dedicated pronunciation drills for a few minutes during each class, these findings suggest a positive correlation between pronunciation drills and improved intelligibility. Also, it should be noted that the small sample size ( $N=29$ ) limits the validity of these findings and certainly suggests that further research is warranted.

## **Chapter 5**

### **Discussion and Conclusions**

#### **Discussion**

In this closing chapter the results from chapter four will be discussed in further detail, a conclusion will be presented, and further research will be proposed. First, this chapter will highlight the impact of the findings in relation to the research questions: Is there a significant difference in intelligibility between the treatment group utilizing a dedicated pronunciation-learning program and the control group; can short-term exposure to pronunciation drills significantly improve target pronunciation in adult second language learners; and, can the use of simple tongue twisters and voice exercises suffice as pronunciation drills to significantly improve pronunciation skills in adult second language learners?

This chapter also includes a brief discussion of the additional exploration, the Pronunciation Attitude Inventory survey (PAI; see appendix F) which was administered in an attempt to discern the effects of students' attitudes and motivations for improving their pronunciation skills. Next, the deficiencies and shortcomings of this study are addressed and ideas for research revisions are suggested. Finally, in the hope of informing educators, academia, and further research related to improved pronunciation skills for second language learners, the findings from this research are contrasted to other research available in the field. Alas, such research is very sparse in the current academic milieu.

#### **Interpretation of Results**

The results of this quasi-experiment in pronunciation in second language learners were analyzed using paired samples t-test. This test of significance was used to compare the mean scores of the two groups, control and treatment, and to discover if any relationships existed

between the independent variable (the use of dedicated pronunciation drills) and the dependent variable (intelligibility levels). The before-after scores of the two groups were evaluated with both groups showing improvement in intelligibility during the course of this study. The standard and academically accepted  $p = .05$  was used to indicate statistical significance. Both groups showed statistically significant changes (control group,  $p = .032$ ; treatment group,  $p = .001$ ). However, it is important to note here that the treatment group did show a bit more measureable change. The possibility of these changes occurring by chance in either group is very low. Further, it is understandable that both groups would show some improvement in intelligibility simply due to exposure to the English language on a regular, albeit brief, basis. The treatment group showed a stronger positive relationship between the dedicated pronunciation drills they received and greater improvement in intelligibility at  $p = .001$ . Whereas the control group showed less improved intelligibility at  $p = .032$  which, although statistically significant, could be explained by mere regular exposure to the target language, as noted above.

These results indicate that the pronunciation drills had a strong positive impact on the treatment group's intelligibility levels, which answered my first research question: Is there a significant difference in intelligibility between the treatment group utilizing a dedicated pronunciation-learning program and the control group? These results also indicate that the simple tongue twisters and voice exercises practiced in the treatment group helped to improve intelligibility in the target language because greater improvement was observed in this group. This supports the premise that pronunciation drills have a positive impact on second language learners' pronunciation skills. These results further indicate that even short-term exposure to pronunciation drills helped to significantly improve pronunciation in adult second language learners and answered my second research question: Can short-term exposure to pronunciation

drills significantly improve target pronunciation in adult second language learners? And finally, these results also indicate that the use of simple tongue twisters and voice exercises as pronunciation drills are sufficient to significantly improve pronunciation skills in adult second language learners which answered my third and final research question: Can the use of simple tongue twisters and voice exercises suffice as pronunciation drills to significantly improve pronunciation skills in adult second language learners?

### **Additional Exploration**

In the interest of discovering what effects, if any, students' attitude toward and motivation for improving their English pronunciation skills had on students' pronunciation performance, additional exploration was performed via the Pronunciation Attitude Inventory (PAI) survey (see appendix F). This survey was administered to all students at the onset of this quasi-experiment in pronunciation skills. While only a perfunctory analysis was performed on the PAI survey results, it was readily apparent to me that none of the students had an aversion to learning and speaking English. In fact, most of the student respondents/ participants indicated a desire to achieve better pronunciation skills in the target language. Although the results of the survey were not directly considered for data analysis, the survey did inform this study in that it rendered certain information about the motivation of the student participants. The survey generally showed that all student participants were at least somewhat interested in improving their English speaking skills and, at best, were highly motivated to improve their intelligibility levels. Moreover, this survey helped to open the door for other variables that might be considered in future research such as gender and age considerations.

### **Shortcomings of the Research**

Questions remain as to whether or not these pronunciation drills are solely responsible for the student participants' significantly improved intelligibility in the target language. The correlations appear to be strong; however, it is important to consider that some of the methods used (paired samples t-test) to identify and analyze intricate variables such as those studied herein (use of dedicated pronunciation drills and intelligibility levels), are more successful with certain variables than with others. That is, according to Gay, Mills, and Airasian (2012), certain variables such as the use of dedicated pronunciation drills and intelligibility levels, can be more difficult to fully understand and measure accurately. Furthermore, the results of the paired samples t-test used for this study can be influenced by a variety of uncontrollable factors which could influence the outcome. For example, outcomes related to improved intelligibility levels may differ due to a myriad of other variables including but not limited to sample size, time span of study (one semester), location, age, ethnography and demography, etc. The sample size used in this study was small (total N = 29; control group, N = 14; treatment, N = 15). Due to the small sample size, it may be difficult to apply these findings to larger groups or even groups outside of South Korea. Also, due to the small sample size, it is- perhaps even rather dubious- to even try to apply these findings to populations outside of South Korean university students. Further, this entire research study took place during the course of one semester and at a university in South Korea with only university-aged students, thereby further limiting the ability to apply the findings of this study not only to larger populations, but again, to populations outside of South Korea. Although it may be possible to replicate this study in other Asian countries such as Japan and China (merely due to the fact that these other Asian countries have languages that contain similar sound inventories); it would be difficult to find similar demographics, and even more

difficult to broadly apply the findings of this study to larger, non-Korean populations.

Additionally, the short time span of this research makes it difficult to pinpoint whether or not the pronunciation drills were solely or even mostly responsible for the statistically significant improved intelligibility levels or if simple exposure to the English language plays a bigger role. Student participants' extra-curricular exposures to English were not gauged. Finally, the ethnography and demography of the student participants in this study were not observed and therefore many variables may have been overlooked, again limiting the scope of these findings.

Lastly, although this study was modeled after the exemplary research performed by Munro and Derwing (2008) and Derwing, Munro, and Weibe (2000), the efforts to conduct this study revealed that there remains a concerning vacuum of solid research in the field of pronunciation. According to Munro and Derwing, "longitudinal investigations of L2 vowel acquisition are rare" (2008, p. 482). The research conducted by Munro and Derwing (2008) included vowel sound production in simple CVC (consonant-vowel-consonant) words and even though, for example, the difference in sound between the /r/ and /l/ sounds are difficult for South Korean students to perceive, correct pronunciation is not impossible to achieve in adult second language students (Munro & Derwing).

**Ideas for revisions.** If this study were to be revised and performed again, I would want to include students from other universities inside of South Korea. It may even be advantageous to expand this research to include universities from outside of South Korea as well, such as Japan and/or China (whose native languages have similar sound inventories) so that the findings of this research may become more internationally applicable. Additionally, I would suggest that the sample size be increased and that demographics of the student participants be addressed and accounted for in the analysis in an attempt to have the results be more significant. Further, I



would like to be able to conduct this research during a longer period of time in an effort to have to results become more meaningfully associated and show stronger (or weaker) correlations.

Adult students would remain as the primary focus of the research because, as noted in chapters one and two, adults learn in very different ways than their younger counterparts. I prefer working with students because students have an assumed educational regime which, hopefully, fosters a positive learning environment. Also, students attend formal classes, whether in person or online and, as a result, have more structure that may be controlled for.

Unfortunately, many language teachers around the world often find it difficult to meet the needs of their students regarding proper pronunciation and therefore choose to ignore this vital subject entirely. A survey conducted by Hismanoglu and Hismanoglu (2010) included one hundred-three English language teachers in Europe and showed that 12.9% preferred reading aloud for pronunciation practice, while 11.7% preferred the use of dictionaries and dialogues. Surprisingly, only 7.8% used tongue twisters to elicit proper pronunciation from their students. Simple tongue twisters are so valuable for their intense target-specific phonemes that can be tailored to explicit pronunciation requirements and the learners' diction hurdles intrinsic to their mother tongue. For instance, as noted above, the South Korean students' difficulty with pronunciation discrimination between the /r/ and /l/ sounds can be given concentrated attention with the simple tongue twister (voice exercise) "red leather/ yellow leather." If I were to repeat this research study, I would probably keep many of the same tongue twisters and voice exercises because they were developed and/ or adopted for use with these South Korean students in mind. I may, however, attempt to tailor these pronunciation drills even more specifically to the distinct needs of the students. Further, due to the simplicity, availability, and ease of use of tongue twisters, I believe that tongue twisters were to the correct choice for my methods and goals in

helping my students achieve better pronunciation skills. There are many pronunciation methods available, the research presented here is merely one approach, but it is an idea that should be considered by all second language teachers.

## **Conclusions**

This study addressed the following research questions: Is there a significant difference in intelligibility between the treatment group utilizing a dedicated pronunciation-learning program and the control group; can short-term exposure to pronunciation drills significantly improve target pronunciation in adult second language learners; and, can the use of simple tongue twisters and voice exercises suffice as pronunciation drills to significantly improve pronunciation skills in adult second language learners? Using paired samples t-test a strong positive correlation was observed between the use of dedicated pronunciation drills and intelligibility levels. By these correlations, we can assume that by the repeated repetition of specific pronunciation drills, improved intelligibility will be achieved. Further, argument can be made that pronunciation drills (as set forth in this research study and developed by this researcher) are undervalued and are in need of much more academic consideration. Academia is in constant search for novel approaches that sometimes tend to overlook the tried and true methodologies. Most teachers in academe, music, sports, and other areas realize that repetitions are some of the best ways to study, learn, and become proficient. In the interest of facilitating our students' grasp of the target language, the importance of pronunciation drills should be appraised at its real value. This immense value should be neither assumed nor ignored. The value of pronunciation drills has received short shrift, eclipsed by the clamor for more novel approaches.

**Implications for Further Study**

The need for studies (both longitudinal and short-term) that are focused on pronunciation skills has been mentioned by others and deserves an echo here. A fair appraisal of pronunciation drills can only be accomplished if the research is performed scientifically, over a period of several years. Funding and oversight are required to enable an adequate investigation of such duration. The findings of this research suggest and indeed, demand further investigation into this nearly forgotten field. In order for our students to succeed in this global linguistic era, we educators must endeavor to help our students achieve in their new language skills not only in reading and writing, but in speaking as well. Arguably, pronunciation is the leading edge of language acquisition. Languages have been referred to as "tongues" for good reason. A better way is within our reach and should be explored rigorously. It is right on the tip of our tongue!

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*Appendix A***List A**

<b>1. deep</b>
<b>2. lock</b>
<b>3. seat</b>
<b>4. put</b>
<b>5. sheep</b>
<b>6. tune</b>
<b>7. team</b>
<b>8. bought</b>
<b>9. keep</b>
<b>10. box</b>

**List B**

<b>1. dip</b>
<b>2. rock</b>
<b>3. sit</b>
<b>4. foot</b>
<b>5. ship</b>
<b>6. dune</b>
<b>7. tin</b>
<b>8. fought</b>
<b>9. kit</b>
<b>10. fox</b>

**List C**

<b>1. pan</b>
<b>2. vet</b>
<b>3. light</b>
<b>4. wood</b>
<b>5. pool</b>
<b>6. late</b>
<b>7. jam</b>
<b>8. tan</b>
<b>9. vice</b>
<b>10. chew</b>



## List D

<b>1. fat</b>
<b>2. ten</b>
<b>3. rice</b>
<b>4. won</b>
<b>5. fool</b>
<b>6. rain</b>
<b>7. van</b>
<b>8. than</b>
<b>9. bite</b>
<b>10. jew</b>

## Appendix B

Rater Number \_\_\_\_\_

For each item, please place a **check mark** beside the word you hear or **other** if the students pronunciation matches neither of the words given.

SPEAKER		
1	#	1001
deep	dip	other
lock	rock	other
seat	sheet	other
put	foot	other
sheep	seat	other
tune	dune	other
team	tin	other
bought	put	other
keep	kit	other
box	fox	other
2		
deep	dip	other
lock	rock	other
seat	sit	other
put	foot	other
sip	ship	other
done	dune	other
team	tin	other
bought	fought	other
keep	kit	other
box	fox	other
3		
pan	fan	other
vet	bet	other

SPEAKER		
1	#	1002
deep	dip	other
lock	rock	other
seat	sheet	other
put	foot	other
sheep	seat	other
tune	dune	other
team	tin	other
bought	put	other
keep	kit	other
box	fox	other
2		
deep	dip	other
lock	rock	other
seat	sit	other
put	foot	other
sip	ship	other
done	dune	other
team	tin	other
bought	fought	other
keep	kit	other
box	fox	other
3		
pan	fan	other
vet	bet	other

SPEAKER		
1	#	1003
deep	dip	other
lock	rock	other
seat	sheet	other
put	foot	other
sheep	seat	other
tune	dune	other
team	tin	other
bought	put	other
keep	kit	other
box	fox	other
2		
deep	dip	other
lock	rock	other
seat	sit	other
put	foot	other
sip	ship	other
done	dune	other
team	tin	other
bought	fought	other
keep	kit	other
box	fox	other
3		
pan	fan	other
vet	bet	other

light	right	other	light	right	other	light	right	other
wood	won	other	wood	won	other	wood	won	other
pool	fool	other	pool	fool	other	pool	fool	other
late	rate	other	late	rate	other	late	rate	other
jam	van	other	jam	van	other	jam	van	other
tan	than	other	tan	than	other	tan	than	other
vice	bite	other	vice	bite	other	vice	bite	other
chew	Jew	other	chew	Jew	other	chew	Jew	other
4			4			4		
pat	fat	other	pat	fat	other	pat	fat	other
vet	ten	other	vet	ten	other	vet	ten	other
light	rice	other	light	rice	other	light	rice	other
wood	won	other	wood	won	other	wood	won	other
pool	fool	other	pool	fool	other	pool	fool	other
late	rain	other	late	rain	other	late	rain	other
jam	van	other	jam	van	other	jam	van	other
tan	than	other	tan	than	other	tan	than	other
vice	bite	other	vice	bite	other	vice	bite	other
shoe	Jew	other	shoe	Jew	other	shoe	Jew	other

  

1	SPEAKER #	1004	1	SPEAKER #	1005
deep	dip	other	deep	dip	other
lock	rock	other	lock	rock	other
seat	sheet	other	seat	sheet	other
put	foot	other	put	foot	other
sheep	seat	other	sheep	seat	other
tune	dune	other	tune	dune	other
team	tin	other	team	tin	other
bought	put	other	bought	put	other
keep	kit	other	keep	kit	other
box	fox	other	box	fox	other

2		
deep____	dip____	other____
lock____	rock	other____
seat____	sit____	other____
put____	foot____	other____
sip____	ship____	other____
done____	dune____	other____
team____	tin____	other____
bought____	fought____	other____
keep____	kit____	other____
box____	fox____	other____
3		
pan____	fan____	other____
vet____	bet____	other____
light____	right____	other____
wood____	won____	other____
pool____	fool____	other____
late____	rate____	other____
jam____	van____	other____
tan____	than____	other____
vice____	bite____	other____
chew____	Jew____	other____
4		
pat____	fat____	other____
vet____	ten____	other____
light____	rice____	other____
wood____	won____	other____
pool____	fool____	other____
late____	rain____	other____
jam____	van____	other____
tan____	than____	other____
vice____	bite____	other____
shoe	Jew____	other____

2		
deep____	dip____	other____
lock____	rock	other____
seat____	sit____	other____
put____	foot____	other____
sip____	ship____	other____
done____	dune____	other____
team____	tin____	other____
bought____	fought____	other____
keep____	kit____	other____
box____	fox____	other____
3		
pan____	fan____	other____
vet____	bet____	other____
light____	right____	other____
wood____	won____	other____
pool____	fool____	other____
late____	rate____	other____
jam____	van____	other____
tan____	than____	other____
vice____	bite____	other____
chew____	Jew____	other____
4		
pat____	fat____	other____
vet____	ten____	other____
light____	rice____	other____
wood____	won____	other____
pool____	fool____	other____
late____	rain____	other____
jam____	van____	other____
tan____	than____	other____
vice____	bite____	other____
shoe	Jew____	other____

### *Appendix C*

#### Letter of Consent

##### A Study of Pronunciation Skills in Adult ESL Students

Dear Students,

My name is Ms. Joni Pagnotta and I am a professor here at Woosong University. I am also a student pursuing a doctoral degree in the Department of Educational Foundations and Leadership at George Fox University, Newberg, Oregon, USA. I am conducting research on how adults learn pronunciation skills in English as a Second Language (ESL) classrooms. You are invited to take part in two voice recording sessions that will take about 10 to 15 minutes each. The first session will be conducted now and the second session will be conducted in early December.

The findings promise to reveal greater insight into how adults learn better pronunciation skills in English.

The risk associated with this research is very minimal. The voice recordings will include 4 lists of ten words each (a total of 40 simple words). The words will be simple English words. The voice recordings should not create any stress. Nevertheless, please be aware that your participation is completely voluntary and you may decline to continue at anytime.

The results of this study will only be used for research purposes and may be used for presentations at professional conferences and/ or academic publications. The voice recordings will be made on a laptop computer and will be analyzed and presented in an anonymous fashion and no individual will be personally identified. I affirm to keep any personal information and identities confidential.

All research materials (i.e., voice recordings, surveys, and signed consent forms) will be locked in a separate, a secure location for a period of no less than three years. I will be the only

individual will who will have access to these materials. After three years, I will personally destroy all relevant materials and delete all the voice recordings.

I thank you for your time in considering this project. If you choose to participate, please be aware that you are making a contribution to furthering English language pronunciation skills educational research. If you have any questions regarding this research, please contact me at 010-9015-6003. If you have any additional questions, you may contact Dr.Song-Do Sun, Ph.D. Woosong University, 054-770-5135; 010-3818-8569.

If you understand the use of this research and agree to participate, please sign below.

Participant signature \_\_\_\_\_

Researcher signature \_\_\_\_\_

# 동 의 서

성인 ESL 학생들의 발음 기술에 관한 연구

친애하는 학생들에게,

저는 여기 경주 대학 조니 패그노타(Joni Pagnotta) 교수입니다. 또한 미국 오레곤주 뉴버그에 있는 조지 폭스 대학에서 교육학 및 리더십 과정의 박사 학위를 공부하고 있는 학생입니다.

저는 제 2 외국어 수업에서 성인들이 어떻게 영어 발음 기술을 습득하는지에 관해 연구를 수행하고 있습니다. 당신들은 각각 10-15 분 정도 소요될 발음 녹음 2 개의 세션에 참여하도록 초대되어 있습니다. 첫 번째 세션은 현재 지금 실시되고 두 번째 세션은 12 월 초에 실시됩니다.

연구 결과를 통해 성인들에게 있어 영어의 보다 나은 발음 기술 습득 방법에 관하여 통찰력을 밝힐 것을 약속 드립니다.

본 연구와 관련된 위험성은 아주 적습니다. 음성 녹음은 단어 10 개로 구성된 4 개의 목록 (40 개의 간단한 단어의 합계)을 포함 할 것입니다. 단어는 간단한 영어 단어입니다. 음성 녹음은 스트레스를 주지 않을 것입니다. 비록 그렇다 할지라도, 당신의 참여는 완전히 자발적인 것임을 인식하여 주시고 언제든지 원하지 않으시면 거부 할 수 있습니다.

본 연구의 결과는 연구 목적으로 만 사용되며 전문 언어학 회의나 또는 학술지의 프리젠 테이션을 위해 사용됩니다. 음성 녹음은 노트북 컴퓨터로 이루어지고 분석 및 익명의 형태로 제출 될 것이며 사적이나 개개인적으로 식별되지 않을 것입니다. 저는 개인 정보 기밀 및 ID 를 보호할 것입니다.

모든 연구 자료 (예, 음성 녹음, 설문 조사 및 서명 동의서)를 삼 년 이하의 기간 동안 개별적이고, 안전한 곳에 잠금 장치를 통해 보관할 것입니다. 오직 연구자인 저만 본 연구를 위해 수집된 자료에 액세스 할 수 있을 것입니다. 삼 년 후, 저는 개별적으로 수집한 모든 관련 자료를 파괴하고 모든 음성 녹음을 삭제할 것입니다.

이 프로젝트를 위해 시간 내어 주셔서 감사합니다. 참여하기를 원하시는 경우, 당신은 영어 발음 기술 교육 연구 발전에 기여하고 있다는 점을 유념해 주시기 바랍니다. 이 연구에 관한 문의 사항이 있으시면 010-9015-6003 로 연락 주시기 바랍니다. 본 연구 자료 수집에 관하여 추가 질문이 있으시면, 경주대학교 한 상호 박사님께(054-770-5135; 010-3818-8569) 연락 주시기 바랍니다.

본 연구의 자료 수집을 이해하고 참여에 동의하는 경우, 아래에 서명(싸인) 부탁 드립니다.

참가자 서명 \_\_\_\_\_

연구자 서명 \_\_\_\_\_





*Appendix D*

1. What a to do to dine today at a minute or two to two!

A thing distinctly hard to say but harder still to do.

And the dragon will come when he hears the drum

At a minute or two to two today, at a minute or two to two.

2. Vincent vowed vengeance very vehemently.

3. How much wood would a woodchuck chuck  
if a woodchuck could chuck wood?

4. Whether the weather is cold,  
Whether the weather is hot,  
We'll weather the weather, whatever the weather,  
Whether we like it or not.

5. She sells sea shells by the sea shore.  
So if she sells sea shells on the seashore,  
I'm sure she sells seashore shells.

6. Peter Piper picked a peck of pickled peppers.  
If Peter Piper picked a peck of pickled peppers,  
where's the peck of pickled peppers Peter Piper picked?

7. The round red robin rolled over the resting rabbit.

8. Lazy lilting lady loosing love lamenting.

9. Unique New York (3x)

10. Friendly Frank flips fine flapjacks.

11. Red Leather, Yellow Leather. (3x)

### *Appendix E*

#### Instructions For "Pronunciation Treatment Group"

Please use at least 10 minutes per class on these pronunciation exercises.

Please start with # 7, 8, and 11 ("R" sound, "L" sound, and the combination of "R" & "L" together).

Please explain and demonstrate the correct mouth and tongue positions for the proper pronunciation of these sounds. For example, for the "R" sound the lips are pursed (pushed out) and the tongue is pushed down inside the mouth. Whereas, for the "L" sound the tongue is up near the top front teeth.

Please spend time on the individual sounds (phonemes) of each new sound as it is introduced.

Please spend 2 or 3 weeks with these sounds and then as the students improve (and get faster) you can start on the others.

The first 2 lines of #1 should be started next (but also include # 11) and should be worked on in quarters (What a to do to dine today/ at a minute or two to two/ A thing distinctly hard to say/ but harder still to do).

*Note: This may be a good time to take a few minutes to explain about "reduction" in conversation English (& other languages). For example in writing and formal speaking each sound is pronounced; in N. American spoken conversation, it sounds more like: /wada t'do t'dine t'day/. This tends to aid in fluency.*

*Appendix F**Page 1 of 2****Pronunciation Attitude Inventory\****

발음 태도 목록\*

**Please rate these statements on a scale of 1 to 5.**

다음 문장의 1-5 번호에 평가 해주십시오.

5= Always or almost always true of me

4= Usually true of me

3= Somewhat true of me

2= Usually NOT true of me

1= Never or almost never true of me

5 = 항상 또는 거의 항상 참나

4 = 나 보통 진정한

3 = 나 다소 사실

2 = 나 사실이 아니다 보통

1 = 절대로 또는 거의 결코 진정한 나

1. I'd like to sound as native as possible when speaking English.

나는 영어를 말할 때 가능한 한 원어민처럼 말하고 싶습니다.

1      2      3      4      5

2. Acquiring proper pronunciation in English is important to me.

영어의 올바른 발음을 습득하는 것은 나에게 중요하다.

1      2      3      4      5

3. I will never be able to speak English with a good accent.

나는 좋은 억양으로 영어를 말할 수 없을 것이다.

1      2      3      4      5

4. I believe I can improve my pronunciation skills in English.

나는 영어의 내 발음 능력을 향상시킬 수 있다고 생각한다

1      2      3      4      5

5. I believe more emphasis should be given to pronunciation in class.

나는 수업 시간에 발음에 대해 더 중요하게 강조되어야 한다고 생각한다.

1      2      3      4      5

6. One of my personal goals is to acquire good enough pronunciation skills to be able to pass for a native speaker.

나의 개인적인 목표 중 하나는 원어민 만큼 충분히 좋은 발음 기술을 습득하는 것이다.

1      2      3      4      5

**Page 2 of 2**

5= Always or almost always true of me  
 4= Usually true of me  
 3= Somewhat true of me  
 2= Usually NOT true of me  
 1= Never or almost never true of me

5 = 항상 또는 거의 항상 참 나

4 = 나 보통 진정한

3 = 나 다소 사실

2 = 나 사실이 아니다 보통

1 = 절대로 또는 거의 결코 진정한 나

7. I try to imitate native speakers' pronunciation whenever possible.

나는 언제든지 가능하면 원어민 발음을 모방하려고 한다.

1      2      3      4      5

8. Communicating effectively is much more important than sounding like a native speaker.

효과적으로 의사소통 하는 것은 원어민 처럼 소리 내는 것 보다 더 중요하다.

1      2      3      4      5

9. Good pronunciation skills in English is not as important as learning vocabulary and grammar.

영어에서 좋은 발음 능력은 어휘와 문법을 배우는 것보다 중요하지 않다.

1      2      3      4      5

10. I want to improve my accent when speaking English.

나는 영어를 말할 때 내 억양을 향상시키고 싶다.

1      2      3      4      5

11. I'm concerned with my progress in my pronunciation of English.

나는 내 영어 발음의 향상에 대해 걱정하고 있다.

1      2      3      4      5

12. Sounding like a native speaker is very important to me.

원어민 처럼 소리 내는 것은 나에게 매우 중요하다.

1      2      3      4      5

\* Adapted from Elliott, 1995

\* 1995 년 엘리엇에서 적용

### *Appendix G*

Letter of Consent Teacher Participants (Treatment)  
A Study of Pronunciation Skills in Adult ESL Students

Dear Teachers/Professors,

My name is Ms. Joni Pagnotta and I am a professor here at Woosong University. I am also a student pursuing a doctoral degree in the Department of Educational Foundations and Leadership at George Fox University, Newberg, Oregon, USA. I am conducting research on how adults learn pronunciation skills in English as a Second Language (ESL) classrooms. You are invited to take part in this research by agreeing to devote 10 -15 minutes per class (90 minute classes) to dedicated pronunciation drills as instructed by me in writing and orally.

The findings promise to reveal greater insight into how adults learn better pronunciation skills in English.

The risk associated with this research is very minimal. The pronunciation drills are not difficult and should not create any stress for you as educators. Nevertheless, please be aware that your participation is completely voluntary and, if you feel it becomes necessary, you may decline to continue at anytime.

The results of this study will only be used for research purposes and may be used for presentations at professional conferences and/ or academic publications. No individual will be personally identified and I affirm to keep any personal information and identities confidential. All research materials (i.e., signed consent forms) will be locked in a separate, secure location for a period of no less than three years. I will be the only individual who will have access to these materials. After three years, I will personally destroy all relevant materials.

I thank you for your time in considering this project. If you choose to participate, please be aware that you are making a contribution to furthering English language pronunciation skills educational research. If you have any questions regarding this research, please contact me at 010-9015-6003. You may also contact Dr.Song, Ph.D., Head of Electronic Information Department, Woosong University, 042-630-9695; 010-4425-3382.

If you understand the use of this research and agree to participate, please sign below.

Teacher/ Participant signature \_\_\_\_\_

Researcher signature \_\_\_\_\_

### *Appendix H*

Letter of Consent Teacher Participants (Control)

A Study of Pronunciation Skills in Adult ESL Students

Dear Teachers/Professors,

My name is Ms. Joni Pagnotta and I am a professor here at Woosong University. I am also a student pursuing a doctoral degree in the Department of Educational Foundations and Leadership at George Fox University, Newberg, Oregon, USA. I am conducting research on how adults learn pronunciation skills in English as a Second Language (ESL) classrooms. You are invited to take part in this research by agreeing to nothing special in your English conversation classes. Only conduct your classes as you normally would with no special attention (other than you normally would) given to pronunciation.

The findings promise to reveal greater insight into how adults learn better pronunciation skills in English.

The risk associated with this research is very minimal since you will be conducting your classes as usual and therefore, should not create any stress for you as educators. Nevertheless, please be aware that your participation is completely voluntary and, if you feel it becomes necessary, you may decline to continue at anytime.

The results of this study will only be used for research purposes and may be used for presentations at professional conferences and/ or academic publications. No individual will be personally identified and I affirm to keep any personal information and identities confidential. All research materials (i.e., signed consent forms) will be locked in a separate, secure location for a period of no less than three years. I will be the only individual who will have access to these materials. After three years, I will personally destroy all relevant materials.

I thank you for your time in considering this project. If you choose to participate, please be aware that you are making a contribution to furthering English language pronunciation skills educational research. If you have any questions regarding this research, please contact me at 010-9015-6003. You may also contact Dr.Song, Ph.D., Head of Electronic Information Department, Woosong University, 042-630-9695; 010-4425-3382.

If you understand the use of this research and agree to participate, please sign below.

Teacher/ Participant signature \_\_\_\_\_

Researcher signature \_\_\_\_\_



### *Appendix I*

Letter of Consent Teacher Participants (Raters)  
A Study of Pronunciation Skills in Adult ESL Students

Dear Teachers/Professors,

My name is Ms. Joni Pagnotta and I am a professor here at Woosong University. I am also a student pursuing a doctoral degree in the Department of Educational Foundations and Leadership at George Fox University, Newberg, Oregon, USA. I am conducting research on how adults learn pronunciation skills in English as a Second Language (ESL) classrooms. You are invited to take part in this research.

Teacher participants will be asked to first participate in the pilot study to establish a baseline; and second, to take part in listening to and rating other participants' spoken English. By agreeing to listen to and rate the intelligibility levels of other participants' spoken English, you agree to do so in an unbiased as possible manner. You will be listening to two sets of MP3 recordings, delivered to you via email, one each at the beginning and end of the semester. These recordings will vary in length and will probably be approximately 2 and 3 hours in length. You will be asked to rate these recordings in writing on forms that I will provide to you.

The findings promise to reveal greater insight into how adults learn better pronunciation skills in English.

The risk associated with this research is very minimal since you will be listening to the recordings at your own convenience, and therefore, should not create any stress for you as educators. Nevertheless, please be aware that your participation is completely voluntary and, if you feel it becomes necessary, you may decline to continue at anytime.

The results of this study will only be used for research purposes and may be used for presentations at professional conferences and/ or academic publications. No individual will be personally identified and I affirm to keep any personal information and identities confidential. All research materials (i.e., signed consent forms) will be locked in a separate, secure location for a period of no less than three years. I will be the only individual who will have access to these materials. After three years, I will personally destroy all relevant materials.

I thank you for your time in considering this project. If you choose to participate, please be aware that you are making a contribution to furthering English language pronunciation skills educational research. If you have any questions regarding this research, please contact me at 010-9015-6003. You may also contact Dr. Song, Ph.D., Head of Electronic Information Department, Woosong University, 042-629-6410; 010-4425-3382.

If you understand the use of this research and agree to participate, please sign below.

Teacher/ Participant signature \_\_\_\_\_

Researcher signature \_\_\_\_\_

*Appendix J***College of Education**

414 N. Meridian St., V 124, Newberg, OR 97132

503.538.8383 Fax 503.554.2868 [soe.georgefox.edu](http://soe.georgefox.edu)

March 28, 2016

Ms. Joni Pagnotta  
Ed.D. Candidate  
George Fox University

Dear Ms. Pagnotta,

This letter is to inform you that as a representative of the GFU Institutional Review Board I have reviewed your proposal for research investigation entitled "An Examination of How Adult English Second Language Learners Learn Pronunciation Skills." The proposed study meets all ethical requirements for research with human participants. The proposal is approved.

Best wishes as you complete your research investigation.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Huffman", with a long horizontal flourish extending to the right.

Terry Huffman, Ph.D.  
Professor of Education