

Hamline University

DigitalCommons@Hamline

---

School of Education and Leadership Student  
Capstone Theses and Dissertations

School of Education and Leadership

---

Spring 2017

## Teaching Listening For Prominence In Combination With Reading To Help Students Determine New Information

Margaret Genereux  
*Hamline University*

Follow this and additional works at: [https://digitalcommons.hamline.edu/hse\\_all](https://digitalcommons.hamline.edu/hse_all)



Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#)

---

### Recommended Citation

Genereux, Margaret, "Teaching Listening For Prominence In Combination With Reading To Help Students Determine New Information" (2017). *School of Education and Leadership Student Capstone Theses and Dissertations*. 4294.

[https://digitalcommons.hamline.edu/hse\\_all/4294](https://digitalcommons.hamline.edu/hse_all/4294)

This Thesis is brought to you for free and open access by the School of Education and Leadership at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education and Leadership Student Capstone Theses and Dissertations by an authorized administrator of DigitalCommons@Hamline. For more information, please contact [digitalcommons@hamline.edu](mailto:digitalcommons@hamline.edu).

TEACHING LISTENING FOR PROMINENCE IN COMBINATION WITH READING  
TO HELP STUDENTS DETERMINE NEW INFORMATION

by

Margaret D. Genereux

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

Hamline

University

St. Paul, Minnesota

April 2017

Julia Reimer, Primary Advisor  
Suzanne McCurdy, Secondary Advisor  
Sue Ann Rawlins, Peer Reviewer

Copyright by  
MARGARET D. GENEREUX, 2017  
All Rights Reserved

To my husband. Having earned a Master's Degree well ahead of me, I was inspired to follow in his path and provide an example for our son. In his quiet way toward the end, he simply asked if I had finished my paper.

## ACKNOWLEDGEMENTS

Thank you to my Capstone Committee. Your expertise, support and advice greatly helped me complete this project. I owe unbounded gratitude to my research participants whose positive engagement was inspiring. I have learned so much by your allowing me to provide this study.

## TABLE OF CONTENTS

CHAPTER ONE: Introduction.....	8
Role of the Researcher.....	8
Background of the Researcher.....	9
Reading Comprehension.....	10
Given and New Information in Reading Comprehension.....	11
Fluency in Reading Comprehension.....	11
Prominence and Text Understanding.....	12
Guiding Question.....	13
Summary.....	13
Chapter Overviews.....	14
CHAPTER TWO: Literature Review.....	16
Reading Comprehension.....	16
Adult Reading Comprehension Research.....	17
The Syntax of Given and New Information.....	18
Accessibility and Focus.....	21
Impact of Punctuation on Meaning Retrieval.....	22
Fluency.....	23
Definition.....	23
Fluency and Reading Comprehension.....	24

Prosody.....	25
Definition.....	25
Prosody in Childhood.....	26
Impact of L1 Prosody on English Language Learning.....	26
Instruction by Non-Native Teachers- Differences in Intonation..	26
Intonation and Prominence.....	28
The Phonology of Prominence/Intonation.....	30
Intonation Biological Codes.....	30
Pragmatics.....	31
Definition and Impact on New Information.....	31
Phonological and Pragmatic Accessibility.....	33
Instructional Strategies.....	34
Perception in Teaching Pronunciation.....	35
First Language Stress Pattern-Word Stress.....	36
Sentence Stress.....	38
Reading Connection.....	39
Reading Aloud/Repeated Reading.....	39
Reading in General.....	40
Summary.....	40
CHAPTER THREE: Methods.....	43
Research Paradigms.....	43
Quasi-Experimental Design.....	44
Intervention Description.....	45

Data Collection.....	46
Data Collection Tools.....	46
Setting.....	47
Participants.....	47
Data Collection Tool 1: Reading/Listening Pre-Test.....	50
Data Collection Tool 2: Reading/Listening Post-Test.....	50
Data Collection Tool 3: Uptake Sheet.....	51
Data Collection Tool 4: Likert Scale.....	52
Procedures.....	52
Pre-Treatment Review.....	52
Procedure-Day One.....	53
Procedure-Day Two.....	53
Procedure-Day Three.....	54
Procedure-Day Four.....	55
Procedure-Day Five.....	55
Procedure-Day Six.....	56
Procedure-Day Seven.....	56
Procedure-Day Eight.....	56
Ethics.....	57
Data Analysis.....	58
Analysis of Quantitative Data.....	58
Analysis of Qualitative Data.....	58
Summary.....	59



CHAPTER FOUR: Results.....	61
Quantitative Results and Interpretation.....	61
Comparison of Results by Attendance.....	65
Participants with Gains on Inference Identification.....	66
Qualitative Results and Interpretation.....	67
First-Language Influence.....	67
Uptake Sheet.....	69
Likert Scale.....	73
Discussion.....	74
Observations.....	75
Summary.....	76
CHAPTER FIVE: Conclusion.....	77
Summary of Study Findings.....	77
Quantitative Findings.....	77
Support for syntax.....	77
Support for phonology.....	78
Support for pragmatics.....	79
Qualitative Findings.....	79
Support for syntax.....	79
Support for phonology.....	80
Support for the importance of perception.....	81
Research Limitations.....	82
Implications for Further Research.....	83

Implications for Classroom Teaching.....	84
Final Comments.....	85
References.....	86

## LIST OF TABLES

Table 3.1: Demographic Summary of Participants.....	49
Table 4.1 Quantitative Participant Results by Attendance.....	63
Table 4.2 Comparison of Difficulty Level between Pre and Post-Tests.....	64
Table 4.3 First Question Responses – Uptake Sheet.....	70
Table 4.4 Second Question Responses – Uptake Sheet.....	72
Table 4.5 Tabulated Responses of Likert Scale.....	74



## CHAPTER ONE

### Introduction

#### Role of the Researcher

I have been teaching English Language Learners (ELLs) in Adult Basic Education (ABE) since 2000. During much of that time, I have been interested in improving my students' reading skills. In 2009, I was able to participate in a then new initiative, Student Achievement in Reading (STAR) through the U.S. Department of Education, Office of Vocational and Adult Education (OVAE). OVAE has recently been enveloped in to a newer Federal Office of Career and Technical Adult Education (OCTAE), (Kelly and Sparks, 2016). I received training in how to implement individual diagnostic assessments and teach the four components of reading instruction advocated by STAR: alphabetics, fluency, vocabulary, and reading comprehension strategies. While all four components of reading are important for success, I have chosen to focus on the strategy of *fluency* for this study. According to Pikulski and Chard (2005, p. 510) fluency has been synthesized from the Report of the National Reading Panel (NICHD, 2000) as:

“Fluency is manifested in accurate, rapid, expressive oral reading and is applied during, and makes possible silent reading comprehension.”

As I began utilizing that training, particularly in fluency, I wondered why out-loud reading fluency is considered such a strong component in overall reading comprehension and achievement. In this study, I am exploring more about fluency

instruction from a linguistic perspective and wish to incorporate that learning into my STAR reading class. If my students can improve their listening for *prominence* and further their interpretation of new information while reading text, I may be able to make a contribution to STAR teaching for ELLs. *Prominence* is the linguistic term which refers to the most prominent, or most important word, in a statement (Celce-Murcia, Brinton, Goodwin, & Griner, 2010). I am also studying the teaching of prominence to determine whether or not this specific strategy can offer instructional insights for other ESL teachers. I hope my background in education will lend itself useful to this study.

### **Background of the Researcher**

Having started my secondary education in English language arts, reading has been a large part of my professional career. I believe this interest stems from my youth in which I was called upon in many classes to read aloud. Many people have remarked on my clear and understandable voice. Since my years as a young student, I have always believed the ability to read well is not only enjoyable, but essential for success in college and career. I have enjoyed more than 14 years as an Adult Basic Education teacher in a suburb of a large, Upper-Midwestern, metropolitan area and have studied English as Second Language learning since 2000. In 2014 I received an award as Teacher of the Year in Adult Basic Education in my state of residence. Additionally, I completed three years as a member of the State Teacher Team for STAR in my state. My experience in teaching ELLs consists of 10 or more years at a variety of levels. My personal experiences and my teaching experience lead me to believe that the ability to read well is not only enjoyable, but essential for success in college. Furthermore, the increasing quantity of information presented in print and electronically seems to be becoming more

demanding daily. Hence, the ability to read for information, mostly new information, with comprehension is a very desirable goal. With the above thoughts in mind, this study will continue to discuss the goal of reading comprehension.

### **Reading Comprehension**

Teaching adult ELLs is a commonly acknowledged goal of Adult Basic Education (ABE). Included in that goal for ELLs is reading comprehension. Improving reading comprehension has continued to be a goal in many reports or reviews for school children throughout the first decade of the 21<sup>st</sup> century (NICHD, 2000). McShane (2005) extends these goals for the benefit of adult basic education students, and Burt, Kreeft Peyton, and Van Duzer (2005) further extrapolate this advice, with some changes, for adult ELLs. The recent introduction of the College and Career Readiness Standards (CCRS), a new set of standards for adults, supports the need for ABE teachers to employ instruction that reflects three key shifts in academics. The three shifts of complexity, evidence, and knowledge are being integrated into to adult education. Complexity includes more exposure to longer, complex reading that uses academic writing. Evidence involves using information from the text to support conclusions. Knowledge pertains to the focus on informational text for academic and career reading. These new standards have been adapted from Common Core State Standards. Pimental (2013) notes, “The standards sharpen the focus on the close connection between comprehension of text and acquisition of knowledge (p.9).” Since it has been established that reading comprehension is a broadly acknowledged goal, perhaps an insight into new information in reading can be useful.

### **Given and New Information in Reading Comprehension**

One skill in reading comprehension proposed by Haviland and Clark (1974) is a strategy called the Given-New Strategy. It is a process of understanding text. They define given information as information that the speaker/writer presumes the hearer/reader already understands and that new information is that which the speaker/writer presumes is now new for the hearer/reader. Additionally supported is the idea that the most common information structure in English is to put the given information near the beginning of the sentence and the new information toward the end of the sentence. They relate that speakers/authors construct sentences based on what they think the hearer/reader knows, or is aware of. The listener/reader integrates this supposedly unknown information with that which is already supposedly known. The goal of the listener/reader is to commit the new information to old. Committing this new information is part of understanding text (Celce-Murcia, & Larsen-Freeman, 1999; Haviland & Clark, 1974). For the purpose of further gains in reading comprehension, it can be useful to consider one of the STAR components of understanding text: out-loud reading or fluency.

### **Fluency in Reading Comprehension**

Welch-Ross and Lesgold (2012) indicate that there is a connection between fluent reading and reading comprehension in that fluency and reading comprehension can have an ongoing effect on each other. For this reason, I have chosen to concentrate on fluency, for this study.

*Fluency* in the context of reading means being able to read out loud smoothly and at a good rate with expression that includes rhythm and intonation (Burt, et al., 2005).



Fluency, or prosody, as it is also known in the literature, is composed of intonation, volume, tempo, and rhythm in pronunciation (Celce-Murcia, et al., 2010). In this section on fluency/prosody, the connection between the reading concept of fluency and the linguistic term of prosody would seem to have merged. More explanation of prosody in pronunciation from a linguistic perspective and the role of *prominence* as having an interrelationship with intonation in the comprehension of text may be useful in the following section.

### **Prominence and Text Comprehension**

Suprasegmentals can have a much greater impact than segmentals on communication, or miscommunication, particularly for ELLs who may not have had enough instruction in pronunciation. Celce-Murcia et al. (2010) further define *intonation* as the level of pitch, highness or lowness, used by a speaker to produce what is considered *prominent* in a particular context or discourse. Celce-Murcia et al. describe the relationship between intonation and prominence as inseparable. *Prominence* is also described as the word/s most worthy of a speaker's pitch change or on what the speaker wants to *focus*. Gilbert (2010) indicates that focus is what the speaker wishes the listener to understand as the most important information in the message, which is often the new information. Although I learned the broader term, *fluency*, most of the linguistic literature uses prominence with intonation to describe variances in vocal expression (Celce-Murcia et al., 2010). For that reason, I will use the terms prominence and intonation.

In most academic endeavors involving reading, the acquisition of new information is a large goal (Pimentel, 2013). As a result, this study focuses on instruction in helping ELLs better hear pitch changes, or prominence, to see if it may improve students'

understanding of text. This instruction in prominence may also help ELLs determine new information in text.

### **Guiding Question**

Because of my personal experience and personal feelings about reading, I believe providing good reading instruction is a pivotal need in Adult Basic Education in general and for adult ELLs specifically. This is an era of rapid information exchange through communication. I also believe there is a need to have a more technically informed workforce dependent on post-secondary education. The need for reading comprehension skills, especially in the area of information acquisition cannot be doubted (Pimentel, 2013). Fluency, earlier included in reading comprehension and further narrowed to prosody or expression, more interestingly, relate to the linguistic areas of prominence and intonation. Therefore, this study explores the possibility that understanding prominence can impact ESL students' understanding new information in text. The guiding research question is: *Can teaching listening for prominence in combination with reading help students determine new information?*

### **Summary**

This study focuses on teaching adult ELLs skills in listening for prominence in hopes that students may acquire additional skills in understanding new information versus old information in written text when out-loud reading is combined with silent reading. The purpose of my study is also to increase my instructional skills, and share findings with my colleagues. In light of the possible dearth of research on adult ELLs' reading, and even less available on the intersection of listening for the prominent syllables/words and reading ability, I believe that further study is useful and necessary.

In this study, I was both classroom teacher and researcher. Participants included 13 adult ELLs at the high intermediate to low advanced level. They were mostly speakers of Somali. One participant was a speaker of Mandarin Chinese, one was a speaker of Slovak, and another, a speaker of Vietnamese. As a researcher, I used the action research steps of pre-test, intervention, and post-test methodology to explore if teaching listening for prominence can help students determine new information.

### **Chapter Overviews**

In Chapter One, I have given an introduction to the key concepts of given and new information, as well as the connection between prominence/intonation and communication in reading comprehension. Rationale has been provided on the need for such a study, and my research question has been identified.

In Chapter Two, this study will review literature explaining some of the extent of research done on reading instruction and comprehension. As part of reading instruction, reading comprehension will be explored from the perspective of new versus old information. The role of syntax in the conveyance of information will be included regarding the concept of new versus old information and its usual expectation in the understanding of text. How prominence and intonation is considered a specific aspect of prosody, often referred to as fluency in reading, will be studied as part of the linguistic area of *phonology*. The role of *pragmatics*, in the interpretation of new information will be explored. Finally, instructional strategies for teaching listening for prominence will be elucidated.

In Chapter Three, details the research paradigm used, the method of data collection, procedures, ethics, data analysis, and verification of data.

Chapter Four consists of results and their presentation with interpretation and discussion.

Chapter Five consists of a summary of this study, its limitations, along with implications for further research and future teaching.

This study seeks to answer the question: *Can teaching listening for prominence in combination with reading help students determine new information?*

## **CHAPTER TWO**

### **Literature Review**

In Chapter One, topics including reading comprehension, given and new information, fluency, and prominence/intonation were introduced to provide background for further examination to answer the question: *Can teaching listening for prominence in combination with reading help students determine new information?* In this chapter literature will be reviewed that expresses some of the multitude of research in reading comprehension as a need in education in the U.S.

Further sections will explain concepts of given and new information, in addition to the role of syntax in conveying new information to further reading comprehension. Other sections will highlight the role of prosody, also known as prominence and intonation, as part of fluency and discuss prosody within linguistics. Some discussion about pragmatics and its relationship to the conveyance of new information will also be provided. Finally, some instructional strategies for teaching listening for prominence/intonation will follow. Reading comprehension continues.

### **Reading Comprehension**

It is commonly acknowledged that the improvement of reading comprehension is an important endeavor in education. Since the National Reading Panel Report (NICHD, 2000), however, there has been increased attention on reading comprehension. Curtis and Kruidenier (2005) and McShane (2005) have investigated the four major components of

reading: alphabets (phonemic awareness and phonics), fluency, vocabulary, and reading comprehension strategies to support the need for reading comprehension in general.

Commonly held, also, is that gaining information from what is read is becoming a greater need for reading. The need for greater reading skill is supported by the movement toward adopting CCRS (Pimentel, 2013). With the adoption of the CCRS (Pimentel, 2013), there is also an increasing focus on gaining information from what is read. Hopefully, more research into strategies for increasing reading skills for adults will be forthcoming.

### **Adult Reading Comprehension**

Research related to reading improvement before and after the National Reading Panel Report (NICHD, 2000) has mostly been done with elementary school children in mind (Miller & Schwanenflugel, 2008; Whalley & Hansen, 2006). Most reading instruction suggestions for ABE learners seem to have derived from studies conducted on children's reading (Burt et al., 2005; Curtis & Kruidenier, 2005; McShane, 2005). The foregoing authors acknowledge the derivation of children's studies for use with adults. Burt, Peyton and Adams (as cited in Burt et al., 2005) state that at their writing only 47 studies on adult ELLs were conducted and of those only 24 included research in ABE or similar settings. By comparison to the number of studies for children, the number of studies for adults provides increased rationale for this study. Coupled with the implementation of CCRS and its focus on academic achievement, this gap between children's studies and adult studies gives more impetus for further study on the acquisition of information, more specifically, new information or increased knowledge. The following section will look more closely at the concept of new information from a syntactical perspective.

### **The Syntax of Given and New Information**

The concept of the given/new strategy in text or discourse may be explored by first referencing this strategy in the literature by Haviland and Clark (1974). In their early work, *given* information is defined as information which the speaker thinks the listener is already aware of. *New* information is that which the speaker wishes listeners to add to the already known information. Haviland and Clark add further that these two different types of information are usually structured syntactically with given information stated initially, or in subject position, and new information usually stated later in the object position of the sentence. Here is an example from Haviland and Clark, p. 513 (1974):

“The jokes Horace tells are awful.”

In the above sentence, the speaker assumes that the listener or reader already knows about Horace and that he tells jokes; the speaker adds that the jokes are awful. In order to fully understand this statement, the listener needs to add the information regarding “awful” into already known information about Horace. This process requires that the given information be known to the listener, or in linguistic terms, has an antecedent in existence for the listener. They further discuss that the more similar the given information is for the listener/reader, the less inference is needed to add the new information to existing information, which aids faster comprehension.

To extend the concepts of given and new information to reading comprehension and reading retention skills Bock and Mazzella (1983) identified three important steps for comprehension of information:

“1. The given and new information must be identified.

2. Any given information must be related to its antecedent.
3. The new information must be incorporated into memory.” (p. 65).

They continue that if there is operational trouble in any of these steps, comprehension is impaired. Citing Halliday (1967), they support the idea that givenness is most often in subject position while new information is most often in object position. They further added that some readers, more likely beginning readers, may benefit from instruction in the usual syntactic positioning. Bock and Mazella (1983) also noted that the syntactic placement of given and new information aids comprehension. The results of their experiments showed that the use of syntactic placement of new information later in the sentence aided in understanding sentences, but they added that new information was processed faster when the new information received prominent intonation.

They concluded that there are two systems that aid each other in comprehension. One is the syntactic placement of new information and the other is the intonation of new information. Syntactic placement may support silent reading comprehension while the prominent/intonational placement may support auditory comprehension.

Donati and Nespors (2003), however, relate that focus or prominence has a phonological nature that doesn't take its beginnings in syntax. Rather, they note that intonation signals the prominent information in the sentence. This is particularly the case in English because English is a language with word order that is quite fixed and because of that, English speakers have more flexibility in using intonation to change the information focus over grammar.

Cowles (2003) also looked at comprehension as it relates to given and new information. She refers to given and new information and its usual syntactic structure as



one of several possible information structures available to “comprehenders”. She conducted several experiments and found evidence that cognitive understanding is influenced by information structure, especially from information previously stated. Further, she posits, that “information structure both influences and is influenced by the comprehension process” (p. 157). This comprehension process, she adds, involves changes in the mental states of both speakers and hearers. She has proposed what she calls the *Information Structure Processing Hypothesis* (ISPH), in which she posits that the processing of information in a sentence causes the listener/reader to think about information as it is stated in a syntactic position. At the same time, the listener/reader can also change his/her thinking about what information will follow so that speakers/writers and listeners/readers are almost continuously altering their thinking as information is exchanged. In addition to the idea of integrating information as part of comprehension processing, Cowles writes also of the accessibility of referents/antecedents as being important in the understanding of the communication. Cowles references several authors who write of this accessibility using similar, yet different terminology. She cites Prince’s (1981) Assumed Familiarity, Chafe’s (1987) Activation States, Ariel’s (1988, 1990) Accessibility Hierarchy, and Lambrecht’s (1994) Topic Acceptability Scale, when she writes about the integration of new information to update listeners’/readers’ mental states. Cowles also adds that she follows Lambrecht in formulating her IPSH because he also writes of the change in mental states of interlocutors during the addition of new information. She follows up on accessibility in given information and in turn relates the concept to the importance of *focus*.

## Accessibility and Focus

During the process of changing mental states, Cowles continues, the degree of givenness of the information, or the level of accessibility to the listener/reader, has an impact on how easily the listener/reader may add the new information to the old by allowing increased awareness of the referent. As a result of increased accessibility of the given information, Lambrecht (as cited in Cowles, 2003) further posits that new information, or focus, highlights the relationship between the part of the sentence that is new with the previously given information. Lambrecht defines this focus as information which is “pragmatically non-recoverable”, meaning that the information has not been previously mentioned or cannot be guessed at or inferred. These discussions by the authors included above have provided information on the structural or syntactical aspects of the concept of new and given information and its transmission.

Another study regarding the cognitive aspects of processing during reading (Stolterfoht, Friederici, Alter, and Steube, 2007) looks at the relationship between syntactical processing and *implicit prosody*. Implicit prosody can be defined as the ability to hear in one’s mind where the focus is while reading. This concept has been named as the *Implicit Prosody Hypothesis*, also referred to as *phonological coding*. The authors posit that, at the time of their writing, syntactical processing and implicit prosody hadn’t been studied together. They used event-related brain potentials (ERPs) to study the analysis of syntactic ambiguity in sentences. In essence, this study combined both the study of silent reading and reading prosodically for language processing. The authors concluded that both reading structurally and reading prosody implicitly are necessary for the understanding of text.

Although primarily concerned with studying the resolution of ambiguous sentences, Carlson, Dickey, Frazier, and Clifton, (2009) advocated for stronger support for the syntactic position of information in the sentence. However, they add that pitch accents could change the reader's conclusion, but that the syntactical position was a more reliable predictor than prosodic interpretation. The study asserted that focus is primarily grammar that just happens to be made stronger by intonation/prominence and that syntax may trump intonation/prominence in many cases. Contending that focus is primarily grammatical, Carlson et al., (2009) conducted perception experiments to discern if the typical placement of new information was preferred over intonational focus by listeners/readers. Because new information and the intonation indicating its importance usually come later in the sentence, listeners and readers usually expect that type of syntax and intonation to be paired. To summarize their whole study, Carlson et al., (2009) contend that intonation can override syntactic structure, but that more often than not readers and listeners preferred choosing the last phrase as the new information to be focused. They also stated that intonation can make a significant difference in choice, but that even when intonation focused on something other than the final phrase, they concluded that the expected structural placement of new information near the end of the sentence was preferred. To open another avenue of interpretation, punctuation, can be looked at briefly in the combination of syntactical or phonological meaning.

### **The impact of punctuation on meaning retrieval**

Earlier authors wrote that punctuation, or lack of it, also has an impact on text interpretation. As part of her study, Prince (1981) wrote that new information can be more difficult to discern in written text because of the lack of oral context, and that the

difficulty level increases with more intensive abstract content. Bolinger (1986) added that the absence of punctuation, mostly commas, makes the reader use more cognitive skill in the interpretation of written text. Chafe (1988) adds that the lack of commas in more modern text requires the reader to read aloud or use an inner voice to put the punctuation in to derive the best interpretation or author's intent. More recently, House (2006) indicates that the presence of punctuation, which she refers to as "intonation's poor relation" (p. 1545) helps to eliminate some meanings in favor of others.

To summarize the literature so far, some authors indicate that there are two ways to process new information. On one hand, authors cited above support syntactic position analysis and on the other hand, some authors choose to emphasize that oral interpretations are needed. In addition, the lack of commas may compound text understanding. Having looked at syntax and new information as well as prominence/intonation in new information, the following sections will look at prominence/intonation within fluency from a phonological perspective.

## **Fluency**

### **Definition**

Fluency, or more precisely, oral reading fluency, is defined as a general mastery of the surface level of text. It means decoding quickly and accurately (automatically) with appropriate expression (NICHD, 2000; Pikulski & Chard, 2005; Rasinski, Padak, McKeon, Wilfong, Friedauer, & Heim, 2005). Also included in fluency are rhythm and intonation (Burt et al., 2005).

## **Fluency and Reading Comprehension**

Many authors prior to and since the National Reading Panel Report (NICHD, 2000) agree there is a strong relationship between oral reading fluency and reading comprehension (Miller, & Schwanenflugel, 2008; Pikulski & Chard, 2005; Rasinski, et al., 2005). For a brief historical connection, fluent oral reading was once an endeavor in itself. Oral reading ability was prized in the 19<sup>th</sup> century. Stayter and Allington (1991) add that with the shift to silent reading, oral fluency waned. They further concluded that oral reading can add an important dimension to the enactment of author meanings.

Further discussion on the relationship between fluency and reading posits that fluency is a result of automaticity in reading. Readers who can read orally by decoding quickly and accurately with expression have more cognitive processing attention to devote to comprehension (Lagerge & Samuels, 1974). Later authors lend support to this theory and indicate that oral reading fluency is a necessary component of reading comprehension (Curtis & Kruidenier, 2005; McShane, 2005).

Of interest to ABE, there have been two recent studies of adults related to skill in reading fluency having an impact on reading comprehension. One of these studies (Binder, Tighe, Jiang, Kaftanski, Qi, & Ardoin, 2013) compared college students with students in an ABE setting. It was concluded that the less skilled readers did not read as fluently as the more skilled readers. Important distinctions between the two groups were that less skilled readers exhibited more unnecessary pausing and exhibited a decreased use of pitch change, particularly in reading questions. The other study (Mellard, Fall, & Woods, 2013) looked at reading fluency from the perspective of reading speed and errors in words read. The researchers posit that speed or accuracy might best be emphasized

depending on student goals. Those students with academic goals could possibly be better served by teaching speed-reading while students with functional goals may want to concentrate more on being more accurate readers. The development of fluency skills is an issue to be considered by teachers for beginning readers and readers of all grade levels (Rasinski et al., 2005). More specifically for adults, McShane (2005) expands on fluency as it relates to reading comprehension. While initial comprehension is a must for fluency, fluency and reading comprehension go hand in hand; one is useful for the other because the fluent reading of text adds speaker-like expression and increases comprehension.

In the above section, fluency, as a component of reading, has been explained. Before exploring more details of fluency, prosody, intonation, and prominence can be studied.

## **Prosody**

### **Definition**

In the previous section of this literature review, the importance of fluency in reading development has been documented. It has also been documented that prosody as part of fluency development has an important role (Whalley & Hansen, 2006). Prosody includes intonation/prominence, volume, tempo, and rhythm in adding to the intended meaning of discourse or text (Celce-Murcia et al., 2010). Schwanenflugel and Benjamin (2012) write about the connection between prosody and linguistics by discussing expressiveness and its components of pitch and stress. Whalley and Hansen (2006) add that prosody helps to illuminate the syntactic structures by emphasizing or deemphasizing information for greater understanding.

### **Prosody in the Childhood Development of Reading**

According to some authors, the phenomenon mentioned above has its beginnings even before birth. They assert that babies hear their mother's prosody before birth and pay greater attention as newborns. This attention leads to reliance on prosody as they develop first language (L1) learning (Nilsenova & Swerts, 2010). Whalley and Hanson (2006) confirm this prosodic development as having an impact in L1 language acquisition. In turn, this L1 acquisition contributes strongly later in reading comprehension (Whalley & Hanson, 2006).

### **Impact of L1 Prosody on English Language Learning**

In acknowledging L1 prosody development and the importance in language development, Lengeris (2012) and Piske (2012) relate the difficulties placed on learners of a second language (L2) because of the interference from the prosodic patterns of L1. Authors of text books on second language acquisition have certainly expressed the opinion that the development of L2 prosody/suprasegmental competency is extremely important for L2 intelligibility (Avery & Ehrlich, 2005; Celce-Murcia et al., 2010; Parrish, 2004). Below reports two studies highlighting the possible differences in prominence/intonation which may also have an impact on ELLs in a foreign setting.

### **Instruction by Non-Native Teachers—Differences in Intonation**

Riesco-Bernier (2012) conducted a study to compare the intonation patterns of native versus non-native teachers in an English as a Foreign Language (EFL) context. The results of the study which used five tone types for over 50 speech functions, indicated that there was no one-to-one mapping of tone to function. Of interest, however, is that native speakers of English used a greater percentage of possible prosodic

representations in their speech than what non-native speakers used in their speech. The author implies that the greater variation of purposes in the range of pitch tones used by native speakers indicates that non-native speakers lacked the same range of ability to express variances and may not have the same base as native speakers to use the many purposes.

About the same time, two other writers also reported a difference between intonation used by native speakers of English and non-native speakers of English by analyzing responses of “mhm” or “yeah” in providing feedback to the initial speaker’s comment. Participants were all female, aged-matched, and from a university setting. The discourse conversations used in their study came from the Spanish portion of a database of spoken English; interviews with the above females were conducted by native speakers of English. From these conversations, two expressions, ‘mhm’ and ‘yeah’ were chosen because they were used often and because their interpretation through prosody can have numerous meanings. They hold that these expressions are separate from grammar, lexicon, and syntax and as a result, need prosody to fully implement meaning in conversation. Technical equipment and software were used to analyze initial, final, and duration of these two spoken expressions. While the initial pitches of both the native and non-native speakers were similar, the final pitch and duration between the two groups proved statistically different. They stated that this higher ending pitch and the duration in these expressions lead to a more tentative meaning interpreted by non-native speakers and also contributed to the notion that non-native speakers of English perceived native speakers of English as less assertive. The writers submitted the terminology of Brown and Yule (as cited in Romero-Trillo & Newell, 2012) that these feedback elements were



used “more interactionally” by native speakers as being different from a “more transactional” meaning by non-native speakers. They also stated that more production training in the differences of such expressions could be useful for non-native learners of English (Romero-Trillo and Newell, 2012). The following section will further subdivide prosody into one of its most important elements, the combination of *intonation and prominence*, the focus of this thesis.

### **Intonation and Prominence**

In the above section, intonation and prominence were established as prime elements of prosody. While explaining intonation, Celce-Murcia et al. (2010) indicate that intonation is the musical overlay of what is being said, and with prominence conveys information. They also discuss prominence (stress) as being inseparable from intonation. Each group of words relating to an idea, or *thought group*, has a variety of pitch levels with the highest pitch and usually the stress being on the most important part of the utterance or sentence. This variance of pitch from low, to mid, to high, of individual sounds in speech comes together to produce intonation clusters or contours containing a whole utterance. Often there is more than one contour in a sentence and each set of pitch levels creates its own intonation contour. Within each intonation contour, usually one element receives greater prominence/stress and becomes the focus of the contour. Gilbert (2010) adds that speakers use this focus as an emphasis to let listeners know the intended, most important word of the message. The most important word referred to by Gilbert (2010) is the word with the highest pitch (Celce-Murcia et al., 2010). Celce-Murcia et al. (2010, p. 235) (adapted from Allen, 1971) illustrate how these pitches can be shown in

discourse by using lower case letters for the lowest pitch, capital letters for a mid-range pitch, and bolded or larger font for the focus information:

Salesclerk: HOW can I **HELP** YOU?

Customer: I'm LOOKing for a **BLA**zer.

Salesclerk: HOW about a **CAS**ual BLAzer?

Customer: **YES**. SOMEthing in CASual **WOOL**.

An example from written text with new information, the following from Clark & Yorkey (p. 88, 2011), is:

EIGHT **COUN**tries have a **COAST**LINE on the **PERSIAN** GULF and the **GULF** of **O MA**\*an.

In the above example, the asterisk indicates the highest pitch on the prominent syllable of the word Oman. The example would indicate that perhaps the author's intent was to indicate that the newest information is that these countries are also on the Gulf of Oman. This example also shows how the four levels of low, mid, high, and highest levels can be shown.

This section has discussed prosody as a distinct area within fluency. It has also included information on prosody in childhood development of reading and how L1 prosody can impact L2 learning and teaching. The close relationship between prominence and intonation has also been included to represent how interactive the two parts of prosody are. Following is more information on how prominence and intonation are comprised in phonology.

### **The Phonology of Prominence/Intonation**

In the previous section, it has been said that intonation comprises a variety of pitch levels. There are many ways of analyzing prosody/intonation in terms of pitch, vowel lengthening, loudness or stress with the pitch, direction of the pitch contour, the location of the most prominent syllable, or the speed with which the contour falls after reaching its highest peak. However, these detailed phonological analyses are beyond the scope of this study. In the interest of providing information about prominence/intonation from a phonological perspective, another aspect of describing phonology, the Biological Codes (Gussenhoven, 2004) of intonation will be discussed.

#### **Intonation—Biological Codes**

Other aspects of intonation have been investigated by Gussenhoven (2004), who is credited with publishing information regarding prosodic/intonational production based on human physiology. Gussenhoven (2004) describes three codes: the Frequency Code, the Production Code, and the Effort Code that help to explain phonological characteristics common to most languages. The Frequency Code informs us of the differences of body size and how the size of vocal cords and gender impacts pitch range differences. Emotional consistencies across languages related to vocally showing friendliness, uncertainty or assertiveness are also included in the Frequency Code. The Production Code informs us that the systems of breathing regulate the pitch range and strength and are related to how much breath individuals may use in the duration of an intonation contour. The Production Code is connected to information; high beginning is related to new information while low beginnings the opposite. This code can also signal continuation of topic. The Effort Code simply explains that humans use the amount of effort needed in

communication to ensure the message meaning is received, the importance of the communication, especially the urgent nature of the message. He relates that the information gained through the Effort Code is because the speaker wants the hearer to understand the emphasis put on certain syllables/words as a way to draw attention to their meaning. These codes, in particular, the Effort Code, will be commented on further in the section on Pragmatics as the pragmatic approach to making the connection between intonation/prominence and meaning intersect. In general, the paragraphs above on phonology have laid some groundwork for a later look as to how intonation/prominence can be taught and reviewed by teachers and students alike in the section on instructional strategies. In the previous section, the importance of prominence/intonation in conveying meaning has been presented.

To summarize this study so far, it can be said that there are two ways to process new information. Some authors above support syntactic position analysis and others add that both syntactic position and prosodic processing are needed. Information has been included related to the place of prominence/intonation in phonology in addition to information concerning the Biological Codes of intonation in Phonology. Before discussing possible teaching strategies to enhance understanding of new information, the linguistic area of pragmatics can be consulted briefly.

## **Pragmatics**

### **Pragmatics Definition and Impact on New Information**

Grundy (2008) indicates that pragmatics can mean what sentences mean literally “and that when we talk, we convey speaker ‘intentions and strategies’” (p. 3). According to Stewart and Vaillette, (2001, p. 21),

“Pragmatics is concerned with how people use language within a context and why they use language in particular ways.”

In the next section, more information on how the combination of intonation/prominence interacts with pragmatics will be explored. While phonologists write mostly of the physical production and sound realization of intonation/prominence, pragmaticists consider the cognitive aspects of the process of that production and reception. According to Wilson and Wharton (2006), Gussenhoven’s (2004) Effort Code is not only the physical utterance of intonation, but also the speaker’s cognitive effort to convey meaning/information in the clearest manner, while what is required of the listener is cognitive/inferential effort to determine the most relevant meaning. The cognitive/inferential effort required on the part of the listener/reader could be considered similar to, but different from, the cognitive/inferential effort required of listeners/readers in pragmatics. This effort, called *Relevance Theory*, is explained by Wilson and Sperber (1994) to mean that humans have the cognitive ability to decide on what is most relevant in a communication in the face of possible vagueness in sentence grammar. Grundy adds that this theory (2008, p. 134) “enables us to make sense of actual instances of spoken interaction and written language.”

In the previous section, the impact of prominence/intonation on meaning has been presented. Brief information of this meaning has been included to show the closeness to pragmatic application in the transmission of information.

### **Phonological and Pragmatic Accessibility**

A previous section of this study has reported on the phonology of intonation and that intonation/prominence can signal the pragmatic realization of new information for the hearer and by sentence structure when read prosodically. The results of a perception study done by Baumann and Grice (2006) showed that the preferred intonation of accessible information is not always the same, and degrees of accents represent degrees of information status. Although their perception experiment was done in German, English is a Low Germanic language which realizes new information in a similar structure (Baumann & Grice, 2006; Gussenhoven, 2004). In their perception experiment, Baumann and Grice chose to compare two pitch accents placed on given information in subject position. They hypothesized that different pitch accents would be preferred over another depending on the degree of givenness or accessibility. They reasoned that if only one pitch accent were present, hearers would naturally pick that one, but that if there were two pitch accents, a preference would be shown. They also wrote texts in most cases to create a context for reading. Their conclusion was that listeners preferred some accentuation on given information rather than de-accentuation (Baumann and Grice, 2006).

Apparently, these variances in accent, pitch range, tonic, or prominence, all represent native speakers' near automatic cognitive choices in representing information status in conveying meaning as in Gussenhoven's (2004) Effort Code. That same information apparently can be interpreted by listeners/readers as to its relevance.

In the preceding sections, literature regarding the grammar/syntax area of linguistics has been explored to indicate the importance of clause/structure in the

conveyance of given and new information. The research then moved onto phonology along with the suprasegmental components of prosody and intonation with prominence and how intonation/prominence can be used as an additional tool humans have to convey meaning along with syntax. Literature has also been reviewed to describe the relationship between prosody and intonation/prominence and how those suprasegmentals are thought to contribute to the linguistic specialty area of pragmatics. It has been shown that intonation, though largely an area of phonology, is gaining more attention as a topic of interest to pragmaticists. Some of the above researchers believe that in the process of conveying meaning/information, people make decisions in speaking by choosing the best way intonationally, in part, to convey that meaning/information while hearers use the most efficient cognitive process to derive the most relevant interpretation of that meaning/information.

### **Instructional Strategies in Teaching Intonation/Prominence**

Since the teaching of intonation/prominence is included in pronunciation, some perspective on the need for its instruction is useful. According to Parrish (2004, p. 108), “The fact is that many adult learners who receive no formal instruction or feedback on pronunciation may be highly unintelligible, even those who have been in an English-speaking environment for many years.” Also relevant for adult ESL instruction, Avery and Ehrlich (2005) state that although adults do have more difficulty than children in learning accurate pronunciation of English, this possibility “does not absolve ESL teachers of the responsibility of teaching pronunciation” (Avery and Ehrlich, 2005, p. xiii).

When discussing how best to improve pronunciation, many authors posit the teaching of suprasegmentals, specifically prosody including stress, rhythm, and intonation

with prominence as the best way to obtain more comprehensible English in the short-term (Celce-Murcia et al., 2010; Derwing and Rossiter as cited in Celce-Murcia et al., 2010).

These suprasementals are especially advocated because they are regarded as having a greater impact on ELLs' intelligibility in speaking. In addition to production skills, the receptive skills of listening to speakers and understanding of the speakers' intents is highly encouraged in ELL classrooms (Avery & Ehrlich, 2005; Celce-Murcia, et al, 2010; Gilbert, 2010; Guitierrez-Diez, 2012; Lengeris, 2012; Parrish, 2004; Piske, 2008; Romero-Trillo, 2012).

In summary of the importance of teaching pronunciation the element of perception by native speakers of English cannot be underestimated. Not only can native English speakers develop poor attitudes toward ELLs in their communities, the perspectives of potential employers can have a huge impact on employability in America (Parrish, 2004).

### **Perception in Teaching Pronunciation**

From the learner's perspective, perception of skills acquired is equally, if not of more importance, than perception of non-native speakers of English by native speakers. When speaking of vowel pronunciation, a study by Flege, MacKay, and Meador (1999) reported specified sounds need to be perceived as nativelike as possible in order to be produced accurately. Their study looked at groups of Italian/English bilinguals. The participants varied in age of arrival and length of residence in Canada. They concluded that those participants who had come to Canada earlier more accurately produced certain vowel sounds than those who had not been in Canada as long.

Information has also come from neuroscience on the importance of perception when learning a language. Watkins, Strafella, and Paus (2003) used Motor-Evoked



Potential tests in an experiment with subjects to measure brain activation upon exposure to listening to speech and viewing video of people speaking. The study lead the authors to conclude that perception “either by listening to speech or by visual observation of speech-related lip movements, enhanced excitability of the motor units underlying speech production” (p. 992).

Although in a Spanish English as a Foreign Language (EFL) context, Kissling (2014), reports results of a study in which students’ perceptions of the target pronunciation skill became one important indicator of gaining skill in the target pronunciation. She advocates that teachers provide time when beginning instruction for students to fine tune their understanding of the target language sound as that understanding can be a partial predictor of desired pronunciation production.

### **Steps in Teaching Pronunciation**

#### **First Language Stress Pattern-Word Stress**

To help non-native speakers gain native-like melody in English, Avery and Ehrlich (2005) and Romero-Trillo (2012) suggest another starting technique of obtaining information from the students regarding their native language. English is *stress-timed*; speakers of American English usually place more stress on content words such as nouns, main verbs, adverbs, adjectives, question words, and demonstrative pronouns. While stressing these words, some vowels in other words may be reduced to maintain a regular beat and express a sentence with added words in the same amount of time as a short sentence. The following example from Avery and Ehrlich, (2005 p. 74) can help explain the concept:

Birds

eat

worms.

The birds	eat	worms.
The birds	eat	the worms.
The birds	will eat	the worms.
The birds	will have eaten	the worms.

The unstressed words above will have their vowels reduced in what is termed a *schwa*. A schwa is a vowel that is not as fully pronounced so it may be said in less time. It is this reduction that contributes to regular beat. Other languages, in varying degrees, may be *syllable-timed*. Syllable-timed languages may place equal stress on each syllable in a given expression. (Avery & Ehrlich, 2005; Celce-Murcia et al., 2010). Having students know and understand this distinction may help prevent some future errors in stress. Learning articulation of primary stress, secondary stress, and reduced stress is important for ELLs (Avery & Ehrlich, 2005; Romero-Trillo, 2012).

The value of identifying stress on content words versus function words, sometimes called *sentence stress*, is also supported by Avery and Ehrlich, (2005), Celce-Murcia et al, (2010), Gilbert, (2010), Guiteirrez Diez, (2012), and Parrish, (2004). Avery and Ehrlich (2005), Gilbert (2010) and Parrish (2004) are clear in their description of content words as nouns, verbs, adverbs, adjectives, and question words, which are usually stressed. They also provide guidance in the usual situation of not stressing (or de-emphasizing), structure words such as, pronouns, prepositions, articles, conjunctions, or auxiliary verbs. The visualization of stress on syllables or words can be shown in a variety of ways: dots of multiple sizes to show differences in stress, (Avery & Ehrlich, 2005; Clark & Yorkey, 2011; Parrish, 2004); underlining and varied type sizes, (Celce-Murcia et al., 2010); or bolded and/or enlarged vowels to show lengthening or loudness (Gilbert, 2010).

## Sentence Stress

Once the above skills are mastered, teachers can move on to larger chunks of words: those that usually fit together in phrases, clauses, or one sentence. Starting with short, simple sentences, teachers can insert enlarged syllables to show prominence and intonation contours in order to indicate the rise and fall of pitch, especially over the most prominent word in the statement. Several authors employ the technique of showing intonation contours to illustrate how voice pitch rises and falls to give prominence, emphasis, or focus (Avery & Ehrlich, 2005; Celce-Murcia et al., 2010; Gilbert, 2010). These intonation contours are also referred to as *thought groups* and within them, one word usually receives prominence, also called *emphasis, focus, tonic, or nuclear tone* (Avery & Ehrlich, 2005; Celce-Murcia et al., 2010; Gilbert, 2010; Guitierrez Diez, 2012; Parrish, 2004; Romero-Trillo, 2012).

It is at this point that listeners can more clearly learn the meaning of the statement and learn to distinguish through pitch rise the informational focus of the statement and further understand its meaning (Avery & Ehrlich, 2005; Celce-Murcia et al., 2010; Gilbert, 2010; Guitierrez Diez, 2012; Piske, 2012; Romero-Trillo, 2012).

When students are ready, Piske (2012) advises practicing with authentic exercises in interpreting speech remarks in multiple contexts so L2 students can practice receiving and producing meaningful exchanges. This practice should also include explicit explanation of why some parts of sentences receive intonation rather than others. Students need to know that given information is often reduced in stress because the speaker/writer presumes the hearer/reader already recognizes the information as given. Conversely,

teachers can give good instruction to students explaining the increased pitch on new information (Guitierrez Diez, 2012).

### **The reading connection**

Although the receptive and productive skills advocated by the above authors are seemingly for listening comprehension and speech pronunciation only, direct transfer to reading comprehension skills may not be the expectation among all English Language Teaching (ELT) professionals. Except for the teaching suggestion by Guitierrez Diez, (2012) above, the concept of transfer of pragmatic understanding through prominence/intonation to reading comprehension appears to be generally absent from ESL sources reviewed at the time of this writing. However, another study from Trofimovich, Lightbrown, Halter, and Song (as cited in Piske, 2012) found that practice in listening and reading over a period of two years had a good impact on the L2 fluency and comprehension of third and fourth graders. The re-emergence of the topic of fluency in the paragraph above prompts some discussion on the use of the fluency (prosody/intonation) improvement technique called reading aloud.

### **Reading Aloud/Repeated Reading**

Reading aloud is deemed useful by many authors for children in elementary school (Daly, 2009; Dowhower, 1991; Miller & Schwanenflugel, 2008; Stayter & Arlington, 1991, to cite a few). As for teaching adults, reading aloud remains somewhat controversial. Authors such as Curtis and Kruidenier (2005), McShane (2005), Welch-Ross and Lesgold (2012) in following what has been successful for children, support reading aloud, or even repeated reading, for adults. Gibson (2008), Griffin (1992) and Rounds (1992) consider the advantages and disadvantages of reading/repeated reading

aloud for reading development. Advantages are the diagnosis of pronunciation problems, the reinforcement of grapheme and phoneme correspondence, or the support for students too shy to speak on their own. Disadvantages include that reading aloud takes away from comprehension if processing is too slow, that reading aloud well doesn't ensure good pronunciation skills since it's not spontaneous speech, or that reading aloud can lead to the boredom encountered by students having to listen to too many stumbling readers.

However, of interest is the article by Burt et al. (2005) in which they review research for teaching reading to Adult ESL students. Their advice advocates only having students read short selections that feature good examples of English stress and intonation and that all readings are modeled by native-like readers.

### **Reading in general**

Perhaps one of the most relevant approaches is the one offered by Parrish (2004) in which she advises the use of a balanced literacy method dependent on the level of learner. Beginning or intermediate learners may need a slower, word-by-word method (bottom-up) while more skilled readers approaching advanced levels need comprehension strategies encompassing conclusion or inference (top-down) to derive further benefit from reading instruction.

### **Summary**

To summarize this chapter, I have presented information on the importance of reading skills for ABE students in general with particular attention to ELLs. Included in the component skills of good readers are a working knowledge of phonemic awareness and phonics (alphabetic), vocabulary, fluency, and reading comprehension. Fluency, the component of interest in this study, has been narrowed to include prosody, of which

prominence and intonation are key elements. A brief description on ways phonologists measure pitches, loudness, and speed of pitch change has been provided. Although these detailed analytical methods are beyond the scope of this study, the overview provides some insight into the importance of prominence and intonation.

Information on the Biological Codes of Intonation Production has also been provided. Of special interest in these codes is the Effort Code which describes speaker cognitive effort to convey a message since it is at this juncture that the hearer employs cognitive effort to derive the most meaning from what is heard. It would seem that Effort Code Theory, Relevance Theory, and the ISPH (Cowles, 2003) are ways of describing the speaker/listener partnership in conveying information. Throughout the study of these phonological and pragmatic specialties, research on the major interest of sending/receiving new information has been provided to support its role in conveying information. The relevance of infant/childhood reliance on intonation as a meaning carrier has also been given.

A study examining the role of syntax and intonation alone or together in the disambiguation of sentences having two possible antecedents has been included. The process of studying these examples has been helpful in exploring the phenomenon of the variance of intonation that English syntax offers. Another study has been described and exemplified to explain the concept of intonation of emphasis, intermediate emphasis, or de-emphasis of new and given information (Baumann & Grice, 2006). The area of pragmatics proves to be exceptionally exciting in view of the continual cognitive efforts employed by speaker and hearer on what each assumes the other considers new information.

Finally, the importance of teaching prominence and intonation has been re-iterated and instructional strategies for teaching prominence/intonation have been summarized. Impetus for this research is to help fill the possible gap in research related to teaching ABE students. My desire to become a stronger ESL teacher and also offer additional training for my colleagues have given rationale to ask: *Can teaching listening for prominence in combination with reading help students determine new information?*

## CHAPTER THREE

### Methods

Chapter Two discussed the importance of prominence/intonation in communication. Detailed information was covered on what prominence/intonation is from a syntactical, phonological, and pragmatic perspective. Teaching ideas were also explored in order to ask: *Can teaching listening for prominence in combination with reading help students determine new information?*

Chapter Three provides discussion on the research methods and rationale for the research design in this study. The following topics are included in this chapter: research paradigm, data collection, procedures, ethics, and data analysis.

### Research Paradigms

Research for this study was done with a combination of *qualitative* and *quantitative* methods to balance data obtained from this classroom setting. Qualitative research is research designed to gain further understanding of students' perceptions and provide a realistic and holistic view of students' basic interpretation of the nature of educational experiences (Key, 1997). The qualitative instruments in this study include an uptake sheet and a Likert scale. Both these qualitative instruments were included in this study to obtain direct participant description of concepts learned and participant perceptions of their own learning. Due to the possible subjective nature of data collection, possible researcher bias, and application of results to mostly one setting, qualitative research has its limitations (Key, 1997).



In quantitative research, on the other hand, data collection is more objective. In this study, quantitative instruments are the pre- and post-tests to measure prominence perceived along with inferential application of that perceived prominence. Tabulated results on four aspects of participant perception regarding their learning of the target skill were also included from the Likert scale. According to Mackey and Gass (2005), quantification of qualitative data can be useful in data reporting because reviewing researchers may obtain relevant data quickly. Quantitative research usually utilizes a large group of randomly selected participants and involves very controlled circumstances. The results can be more generalizable to other settings because of this control and detachment (Mackey & Gass, 2005). Because random selection of participants is not possible in this setting with a small number of participants, the results may not be as generalizable to other settings.

It is hoped that these methods of obtaining data, both qualitative and quantitative, have resulted in accurate information on how helpful prominence/intonation instruction may be in this particular context.

### **Quasi-Experimental Design**

As mentioned earlier, part of this action research study is quantitative. Quantitative research is characterized by Mackey and Gass (2005) as being controlled, objective, and outcome-oriented. Information derived can be explained in a numerical fashion. With a very large randomly chosen sample, the results can be fairly accurately generalizable. This study, however, is not random and therefore, may not be generalizable to other contexts. In addition, a large, randomly selected group is not realistically possible in this Adult Basic Education setting due to open enrollment and frequent attrition of

students. Given the small number of participants to start, and the nature of Adult Basic Education, all possible students in the classroom are included in the intervention.

However, only data collected from participants who signed a consent form were included in the report of this study. Aside from the impracticality of excluding a group of students, it may be ethically unfair to exclude the possible instructional benefit from anyone. As a result, this study is *Quasi-experimental*. A quasi-experimental design is not usually random and therefore can be useful in second language studies (Mackey & Gass, 2005). Above, information regarding research design as it relates to this study is given. Next, a brief description of the nature of the intervention of this study is provided.

### **Intervention description**

The purpose of this intervention was to learn if participants could gain a greater listening skill in perceiving prominence heard and in doing so more fully understand that prominence as a clue to important information. The title of this study uses the linguistic term of prominence when describing the word and syllable receiving the most prominence, or importance. However, before beginning the intervention, participants were asked if they understood the word *focus* as used by Gilbert (2005). Their responses as to their understanding that it means what is most paid attention to, or important, became quickly evident. This understanding negated the choice of defining and using the word prominence in the intervention as a means of creating more accessibility to participants to the objective of the study. Participants listened to speech and text modeled by CD, teacher, paraprofessional, and volunteer to practice determining the most prominent word/s expressed. Participants also practiced reading texts as modeled and marking phrase boundaries. The intervention consisted of approximately one-half of eight 90

minute class sessions meeting twice weekly. These eight sessions included having participants answer a demographic questionnaire regarding previous pronunciation instruction; review of pre-intervention skills in word stress, sentence stress, and rhythm; and administration of pre- and post-tests, an uptake sheet, and a Likert scale. This intervention and these tools were utilized for the purpose of answering this research question: *Can teaching listening for prominence in combination with reading help students determine new information?* Next, a fuller description of qualitative and quantitative instruments is provided.

## **Data Collection**

### **Data Collection Tools**

The qualitative instruments employed in this study include an uptake sheet and a post intervention interview with a Likert scale. Quantitative instruments include the pre- and post-tests. According to Mackey & Gass (2005), uptake sheets can be used to obtain data on students' perceptions about the pronunciation instruction, or perhaps anything they have noticed about prominence/intonation in general. The uptake sheet was given to participants during the seventh session. After the end of the intervention, a Likert scale was administered to assess participants' feelings of what they learned about fluency in reading, successful use of the instruction, and possible future use of the instruction.

The two multiple-choice assessments were designed by the researcher. The primary purpose of these instruments is to obtain baseline and post intervention measurements of students' abilities to detect the word receiving prominence in each of ten test items.

As part of these two quantitative assessments, students were asked to do a reading-while-listening assessment before intervention and after. These assessments also include inference identification tasks in which the participants selected the one possible inference they understood was best reason the focus word received prominence in the pre-recorded items. The results of these pre- and post-tests helped determine if students developed the ability to detect prominence/intonation during intervention.

### **Setting**

Research for this study was conducted in an ABE program in an Upper-Midwest suburban school district. ABE programs in some states are usually characterized by open enrollment, which means that students may begin classes almost any time of year after completing the qualifying registration intake. Open enrollment also means that students are able to drop out due to the many obstacles such as transportation, child care, or work that our students encounter.

ELLs at this ABE site are placed in one of three or four levels depending on English reading skills on the Comprehensive Adult Student Assessment System (CASAS) or on the Test of Adult Basic Education (TABE).

### **Participants**

Demographic data was collected through a questionnaire (See Appendix A) as well as through the program's student database. The first language for ten participants is Somali; one each speaks Mandarin, Slovak, and Vietnamese as his or her mother tongue. In the question inquiring whether or not the individual had had pronunciation instruction, 12 responded yes and one responded no. Question 2b asked for a more open-ended

descriptive response as to the nature of that pronunciation instruction. Responses indicated some misunderstanding of what pronunciation is.

Question number three was a yes/no inquiry; it asked if participants had had teaching in English classes about saying some words with a higher or lower tone, something like music. This question revealed six yes answers and seven no answers. The last question, also yes/no, asked if participants had had English pronunciation in classes in which they learned the focus word. This last question yielded nine yes answers and four no answers.

Table 3.1 below presents some demographic information about participants. Somali speakers are listed as a group together and speakers of other languages listed separately.

Table 3.1

*Participant Demographic Information*

Pseudonym	First Language	Reading Score	Listening Score
Aicha	Somali	Low Intermed.	Low Intermed.
Abdirisak	Somali	High Intermed.	Low Adv.
Amina	Somali	High Intermed.	High Intermed.
Fardus	Somali	High Intermed.	Advanced
Ibrahim	Somali	High Intermed.	Low Intermed.
Najma	Somali	High Intermed.	Advanced
Faisa	Somali	Low Adv.	Low Adv.
Abdullahi	Somali	Low Adv.	High Intermed.
Fadumo	Somali	Advanced	Advanced
Deka	Somali	Advanced	Advanced
Tien	Vietnamese	Advanced	Low Intermed.
Petra	Slovak	Advanced	High Intermed.
Ming	Mandarin	Advanced	High Intermed.

It should be added that this particular class in this program fits the criteria for managed enrollment. Students registering need to commit to at least 70% attendance. If they are employed or have another legitimate reason, they may be admitted if willing to commit to one day a week. A few of the participants had been with me since the last academic year, however, all have been with me since September. Fortunately, the above participants for the most part have had consistent attendance.

**Data Collection Tool 1: Reading/Listening Pre-test**

Prior to intervention, data were collected through a reading-while-listening pre-test. The pre-test items were teacher designed with some likenesses to the study examples used by Baumann and Grice (2006). Although the Baumann and Grice experiment endeavored to determine participant preference for prominence on given information on one of two choices for prominence, this study's purpose endeavored to provide only one prominent word or words as a way to activate, or give a clue, to the desired inference. The prominence stressed word or words were placed at or near the end of the recorded statement, since it was not known if the information was already in the minds of the participants or if the information was new. The pre-test consisted of ten inference identification items, each consisting of a written statement followed by three possible inferences. Each statement was pre-recorded, and used prominence on the focus word. Participants heard each recorded statement as they saw the written version on their test, and were asked first to circle the word or words with the most prominence, and then to select the best inference, based on the prominence they heard. The object of the pre-test was to establish a baseline on the ability to listen for prominence or focus they heard and see how that focused word would be interpreted in comprehension. They were instructed to mark only one choice. The pre-test was administered as a class with instructions not to share answers. See Appendix B for the pre-test.

**Data Collection Tool 2: Reading and Listening Post-Test**

After intervention, data were collected through a reading-while-listening post-test. As in the pre-test, items were teacher designed with some likenesses to the experiment examples used by Baumann and Grice (2006). Although the Baumann and Grice

experiment endeavored to determine a preference for prominence on given information, this study's purpose endeavored to provide only one prominent word or words as a way to activate, or give a clue, to the desired inference. The post-test included ten items. Each item consisted of a written statement followed by three possible inferences. Each statement was pre-recorded, and used prominence on the focus word. Participants heard each recorded statement as they saw the written version on their test, and were asked first to circle the word or words with the most prominence, and then to select the best inference, based on the prominence they heard. In each of these reading/listening items, participants selected one answer out of three possible. The ultimate goal of the pre-test and post-test combined was to compare any differences between the two. It was hoped that participants would be able to choose the focus word much more easily after intervention. In addition, it was hoped that participants would select a higher percentage correct inferences in the post-test. See Appendix B for the post-test.

### **Data Collection Tool 3: Uptake sheet**

The uptake sheets were given to participants following the sixth day of intervention. They were designed to obtain participants' perceptions of any learning that occurred, whatever was noticed, or any perceptions encountered. In addition, the uptake sheets provided information on lack of understanding of concepts. According to Mackey and Gass (2005) they can help detect any misconceptions in the acquisition process. See Appendix C for the uptake sheet adapted from Mackey and Gass (2005). The last of the instruments follows.



### **Data Collection Tool 4: Likert Scale**

The final data collection tool was a Likert scale to assess participants' perceptions of their ability to hear the focused word when a speaker uses it, as well as how aware they had become in hearing how prominence affects speaker meaning. Although this study did not address production of prominence, participants were asked how well they think they can use prominence to affect their own speaker meanings. Participants' perception of how much more understanding they may derive through the out-loud-reading process was also assessed. See Appendix D for the Likert scale adapted from Mackey and Gass (2005).

The previous sections have provided information on the research paradigm and data collection tools. Following is a description of the procedures used to prepare participants for the treatment and data collection portion of the study. The goal in the foregoing steps is to learn if teaching listening for prominence can help students determine new information.

## **Procedures**

### **Pre-Treatment Review**

Since the focus of this study concerns prominence, or focus, on new information, it was determined that participants would need a re-activation of their prior knowledge of stress in pronunciation. Some review lessons prior to pre-test data collection consisted of instruction on multi-syllabic words including primary stress, secondary stress and reduced, or weakened stress as well as rhythm identified by Clark and Yorkey (2011), Gilbert (2010) and Celce-Murcia et al. (2010).

After instruction in word stress, stress on words that can be nouns or verbs, sentence stress, stress on content words, rhythm, and after approval for data collection, the

informed consent information letter was distributed. Ample time was given in the classroom to read all sections of the information letter and answer questions about the study. All students were reassured that their identity would be protected and that their participation is voluntary. They were also assured that all would receive the instruction regardless of willingness to be a participant.

### **Procedure – Day One**

Signed Informed Consent forms had all been collected. Participants were asked to complete the language and previous pronunciation instruction questionnaire as a class. Teacher, paraprofessional, and volunteers circulated the classroom answering questions about what was being asked, but not directly contributing to the students' choice of answer. The questionnaires were collected. Review of word stress, sentence stress, and rhythm were also conducted that day. This review of word stress, sentence stress, and rhythm was followed up by teacher and volunteer demonstration of rhythm by singing a few verses of "This Old Man" from Clark and Yorkey (2011). Due to the time devoted on the questionnaires and review, the pre-test was deferred until day two.

### **Procedure - Day Two**

The teacher/researcher explained the directions for the pre-reading/listening test. Directions were read by the participants before starting the first item. Participants were administered a set a five practice items before the actual pre-test began. This procedure was to confirm the two-step procedure in each test item. Participants first circled the focus word heard, and only after circling that word, chose from one of three multiple choice responses which indicated the inference that could be made from the word that received focus. Practice-set items were completed under watchful eyes of volunteers,

paraprofessional and teacher. When it was apparent that participants understood the expectations of the pre-test, the practice sheets were collected and placed with the questionnaires in a safe place. Immediately following the practice portion, the pre-test was administered. Students were allowed to hear the recorded portion of the test as needed. Participants were asked to put their names on the tests and then tests were collected.

### **Procedure – Day Three**

Three participants who had been absent the previous class took the pre-test. That data was also collected and secured in a safe place. The intervention lesson began with a brief review of sentence stress and emphasis on content words. Following that introduction, students were introduced to the concept of pitch in English. They listened to and practiced the addition of pitch change starting with two and three syllable words. Moving from individual words, selected lessons from Gilbert (2010) were introduced on choosing the focus word. The class then worked together on a practice lesson from Gilbert in which they chose final content words in some simple sentences. After those lessons, students started a lesson from Gilbert in which the idea of new thought was introduced in a short conversation. With listening tracks to accompany, these lessons provided visuals showing both stress and intonation contours. They were instructed about the process of new thoughts replacing old thoughts in a conversation with stress and pitch creating a new focus word in each new sentence. Practice speaking and listening to words with focus segued into an example from Gilbert showing a short sentence containing two intonation contours each with its own focus word. That lesson also instructed that punctuation often creates the end of thought groups. To complete the typical fluency

reading component of the class that day, the class began forward-slash marking all punctuation in a short reading about “Mia Ham” from Reading Skill for Today’s Adults (Southwest ABE, 2016).

#### **Procedure – Day Four**

During scheduled intervention time, the class reviewed selections from the Gilbert (2010) lesson packet on focus and thought groups and began working on more phrase marking with the “Mia Ham” reading. Class activities included listening to the website reading of “Mia Ham”. This listening was followed by teacher modeling again of the reading with more definite pausing than the recording. Teacher and paraprofessional intervention also included repeated listening for pauses for phrases without punctuation. Students continued practicing reading with pauses and continued marking of phrase boundaries.

#### **Procedure – Day Five**

After a brief review of focus words, pitch, and thought groups, the class began a new reading for the week. A reading about the Kennedy family (Clark & Yorkey, 2011) was given. This reading included forward-slash markings in the first paragraph. The CD was played and students listened to that reading noting the location of phrase boundaries. After some repeated readings, students were given time to listen to teacher reading emphasizing pauses while students were encouraged to mark more phrases. The remainder of the class consisted of students practicing reading out loud while marking phrases, or thought groups.

**Procedure – Day Six**

Day six commenced with a review of the summary of thought groups from Gilbert (2010). This review was followed by checking their thought group markings with the key provided from Clark and Yorkey (2011). The class then began reading and listening to a weekly address by President Barack Obama entitled “A New Chapter With Cuba” (American Rhetoric, 2016). Ample time was taken to answer vocabulary questions and practice out loud reading for the time remaining in class.

**Procedure – Day Seven**

The intervention portion of the lesson began with the completion of the uptake sheets. See Appendix C for an illustration. After a review of the summary of thoughts groups by Gilbert (2010), the class then moved onto continued reading and listening to the reading from Clark & Yorkey (2011) on the Kennedy family. Students were then given the key for that phrasing or thought group marking and worked together to re-read the story with pausing according to authors.

Subsequent to the reading of the Kennedy family, students moved onto an excerpt of a speech by Ronald Reagan from his 1981 inaugural address (American Rhetoric, 2016). Students were given a copy of the early part of the speech, it was read, and students listened to and practiced reading that speech. A sentence was singled out to break into thought groups and determine the focus word.

**Procedure – Day Eight**

Before the post-test was given, students practiced a short conversation from Celce-Murcia et al., (2010). This conversation was a culminating application of intonation contours with stress and pitch highlighting the focus word. The conversation was

practiced orally and with the teacher's and paraprofessional's help, intonation contours, and focused words were identified with stress on appropriate syllables. Volunteers also modeled the conversation expressively.

The post-test was administered in the same manner as the pre-test. Students were given a set of five practice items to ensure the first step of circling the stressed words before reading and choosing from one of three possible answers. After completion of the post-test, students were asked to complete the Likert scale. There were ten participants available for the post-test and Likert scale that day. The following class three additional students were offered and accepted to take the post-test and complete the Likert scale.

The above sections have included information on data collection tools along with materials and procedures for this study. Before going on to discuss data analysis, the importance of ethics must be addressed in the following section.

### **Ethics**

These procedures and data collection were approved by the local school district and The Human Subjects Committee at Hamline University through the regular application process. Many students became participants by signing the informed consent letter included in the data collection, but all received the intervention. Anonymity was maintained for all participants by assigning each a pseudonym deriving from their native-language origins. Throughout the intervention, data collected were placed in a secure file and taken to my home daily. After the completion of the intervention and data collection, all records of data collected remained secure at my home.

## **Data Analysis**

### **Analysis of Quantitative Data**

Under the research paradigm section, this study identified a blend of quantitative and qualitative ways of collecting data. The quantitative data was analyzed by comparing the results of the two-step tests expressed in percentages. The first step in examining the quantitative instruments was to take a quick look to check for overall completeness. The decision was made to analyze a percentage for each step in the two-step tests. Each item of each pre- and post-test was checked to see that each participant circled the intended focus word expressed with prominence. Since there were ten of these items in each test a mental math step yielded a drop of ten percent for each incorrect focus word or words circled. If the participant circled two focus items with one correct and the other incorrect, the participant scored a drop of five percent. Likewise, the procedure for the inferential task of the tests was the same. Each incorrect inference chosen or left unchosen yielded a ten percent drop in total score. After individual percentage scores had been computed, a total percentage correct for each group was computed by averaging results. Since two of the thirteen participants had been allowed to only attend once a week, separate percentage averages were determined for that group. The process was the same for both focus word circling and choice of inference.

### **Analysis of Qualitative Data**

The qualitative data was presented with greater subjective description and provided *triangulation* (Mackey & Gass, 2005). Triangulation may best be described as the method of using different types of instruments to examine results subjectively. The goal with triangulation was to avoid researcher bias. By arriving at the same conclusion in

different ways, corroboration, or confirmation of outcome, can possibly be achieved (Mackey & Gass,). For instance in this study, the demographic descriptions of the participants through the questionnaire and perceptions revealed in the uptake sheets and Likert scale yielded information that was similar to the comparisons of the information gained through the quantitative instruments. These two directions provided confirming evidence of gains in awareness of prominence/intonation.

A collective group description was supplied to enable a more descriptive account of the whole class. One possible factor to consider from the initial questionnaire was the amount of pre-instruction. The noticing factor through uptake sheets also gave a more descriptive look at how well individual participants were attending to and perceiving nuances in intonation. Another important factor included an observational indication of student attitude and engagement in class activities.

It was hoped that utilizing group description through qualitative information along with group quantitative analysis would contribute to more discussion in this small, non-random study. This discussion, hopefully, could help this study in the context of this ESL STAR class formulate a hypothesis by asking the question: *Can teaching listening for prominence in combination with reading help students determine new information?* The process can thereby provide other teachers with alternative clues on how to approach their teaching.

### **Summary**

In this chapter, research methods were discussed showing a contrast between qualitative and quantitative tools. Information was related explaining qualitative instruments as subjective and based on participants' perceptions that can describe the



educational experience from the perspective of those participants. Quantitative methods, in contrast, were described as objective and numerical in nature. Using the two methods helps to provide a more balanced reflection of the results. Because random selection of participants was not possible in this small class, the data collected combined qualitative and quantitative results yielding a quasi-experimental design.

Demographic characteristics of participants were given along with their general description of previous pronunciation education experience. The setting of this class of ELLs was also described. Rationale for the intervention was provided along with pre-teaching review. Descriptions of data collection tools along with reference to specific examples in the appendices were included. Daily procedures were provided along with information of materials used during the intervention phase of this study. Ethical procedures were discussed and steps in data analysis completed this chapter.

The next chapter, Results, includes interpretation of quantitative and qualitative tools. Tabulated results are shown in table 4.1, 4.3, 4.4, and 4.5. Table 4.2 provides comparison information of pre- and post-test contents.

## **CHAPTER FOUR**

### **Results**

This study was undertaken in order to learn if teaching listening for prominence in combination with reading can help students determine new information. The classroom setting, student participants, and procedures in data collection were discussed in Chapter Three. In this chapter, quantitative data and qualitative data are provided along with percentages to relate the whole of each instrument.

#### **Quantitative Data Results and Interpretation**

Quantitative data were collected before intervention in this study through the use of a pre-test. A similar post-test was administered following intervention. Both tests were preceded by a five-item practice set to ensure participant understanding of the two-step procedure. For each item, participants first heard a pre-recorded statement and circled the focus word they heard in the statement. Second, participants were shown three possible inferences that could be made from the information given in the recorded statement, and asked to identify the most logical inference. At participant request, repetitions of item statements were allowed for the practice set and the actual test in order to reduce test anxiety.

Overall results for both the pre-test and the post-test are provided in Table 4.1 below for both the participants maintaining regular two-day-a-week attendance and those allowed only one-day-a-week attendance. First, the average of the pre-test focus-word

identification task scores for all participants was 94.8% correct with all participants achieving a score of 70% or higher correct. The average of the pre-test inference identification task scores for all participants was 69.2% correct with eight participants achieving a score of 70% or higher correct. Second, the average of the post-test focus-word identification task scores for all participants was 98.5% correct, with all participants achieving a score of 70% or higher correct. The average of the post-test inference identification task scores for all participants was 60.3% correct with only three participants scoring 70% or higher correct. The table below shows results for both tasks by two-day-a-week and one-day-a-week attendance group.

Table 4.1

*Quantitative Participant Results by Attendance*


---

Results of participants maintaining 70% or higher on two-day-a-week attendance

Pseudo- nym	Pre-Test		Post-Test	
	Focus-Word Identification Task	Inference Identification Task	Focus-Word Identification Task	Inference Identification Task
Ibrahim	100%	40%	100%	90%
Abdirasak	100%	50%	100%	60%
Aicha	80%	60%	100%	80%
Tien	100%	60%	100%	60%
Faisa	80%	70%	90%	60%
Ming	100%	70%	100%	60%
Amina	90%	80%	100%	80%
Najma	100%	80%	100%	60%
Petra	100%	80%	100%	60%
Fardus	90%	80%	90%	60%
Abdullahi	100%	90%	100%	50%

---

Results of participants only attending one-day a week:

Fadumo	100%	60%	100%	60%
Deka	90%	80%	100%	50%

Results indicate that the average correct score for all participants increased by 3.7% from pre-test to post-test for the focus-word identification task. The total number of errors in the focus-word identification task decreased from pre-test to post-test. However, the average correct score for all participants in the inference identification task decreased by 8.9% from pre-test to post-test.

During the recording process for the post-test, it should be noted that this researcher encountered the need to practice timing of statements and articulation of prominence due to test statements of increased length. After looking more closely at the two tests, it was realized that the post-test was more difficult. A comparison of the two instruments is presented in Table 4.2. A closer look at items in both quantitative assessments reveals that the majority of the post-test pre-recorded statements for the focus-word identification task contained more sentences than in the pre-test items. Hence, the relatively small percent of increase in correct responses on that task may actually indicate a larger increase, given the increased difficulty in the focus-word identification task.

Table 4.2

*Comparison of Difficulty Level between Pre and Post-Tests*

---

Pre-Test # of sentences  
in each item

One sentence = 3  
Two sentences = 6  
Three sentences = 1

---

Post-Test # of sentences  
in each item

One sentence = 2  
Two sentences = 5  
Three sentences = 3

Overall, the difference in the number of sentences may have challenged participants to listen longer for prominence while also concentrating for the meaning of the whole statements during the focus-word identification task. Also, some of the item choices in the inference identification task were longer and written in more complex sentences, possibly contributing to a higher number of errors.

In addition to an increase from pre-test to post-test in the number of sentences in recorded statements, a comparison can be made between the number of content words in each inference identification task in the pre-test and the post-test. In the pre-test, the range of contents words was three to eight; in the post-test, the range of number of content words was three to fourteen. This condition may have also contributed to the increased reading load for participants in the post-test.

### **Comparison of Results by Attendance**

The overall results given above may be also looked at by comparing the results of two different groups within the participants. As mentioned earlier, this is a managed enrollment class in which 70% attendance is required to remain in the class. Some students however, are given an opportunity to attend only once a week if work schedule or commitment to another site is needed. Of the 13 participants who completed the pre and post-tests, 11 did maintain 70% or higher attendance during the eight day portion of the intervention. The other two participants were students who had been given permission to attend only once a week. They would need to maintain at least 70% of their once-a-week attendance. One of these participants maintained 75% and the other maintained 50%.

The 11 participants who maintained 70% attendance realized a 3.6% increase in focus-word identification from pre-test to post-test, but realized a 30.9% decrease in the inference identification task from pre-test to post-test. The two participants who were given permission to attend once a week realized a 5% increase in the focus-word identification task from pre-test to post test, but a 15% decrease in correctness in the inference identification task portion. Of interest when comparing results of the two groups is the possibility that attending only once a week may not be a factor in student progress in this study. Of the two participants who were scheduled to attend once a week, the student who attended a little less actually did better on the post-test than the other student. Overall increases and decreases compare better between the two groups.

#### **Participants with Gains on Inference-Identification**

When looking at the differences of some students within the two-day-a-week group, it can be noted that of the 11, eight either maintained or decreased the number correct on the inference identification task from pre-test to post-test. Only three showed an increase in the number of correct answers on the inference task. A closer look at a few promising results is interesting, although there doesn't seem to be a trend. Abdirisak maintained his 100% correct on focus word identification and increased his accuracy by one item on the inference task. Aicha increased her percentage correct on focus word identification from 80% to 100% and increased her accuracy by two items on the inference identification task. Ibrahim not only maintained his 100% accuracy in focus word identification but also increased his accuracy by five items in the inference identification task of the assessment. In other words, he had 40% correct in the pre-test and 90% correct in the post-test on inference identification task items. The three

individual results in the inference portion of the post-test, in particular, Ibrahim, might provide a situation for a case study, or interview, to try to determine possible affective factors responsible for skill gain. The gains reported regarding the three Somali individuals were gains from the pre-test to the post-test. These results constitute the quantitative portion of the study. It is hoped that looking at the qualitative assessments may also provide interesting information.

### **Qualitative Results and Interpretation**

#### **First-language Influence**

As presented in Chapter Three, a questionnaire was included reporting demographic data about this class. This demographic data is used to provide a fuller description of qualitative results. One area of information determined was the question of what language participants first spoke as a child. The purpose of this question was to learn if participants' first language might impact the learning of American English stress or pitch. The majority of responses indicated Somali as the primary language learned. Information about Somali stress or pitch was not specifically provided from Avery & Ehrlich (2005). However, Lamberti (1991) provides a compilation of 20<sup>th</sup> century writers who maintain that Somali is a Cushitic language of Africa, more specifically, lowland Cushitic. Discussed by Orwin (1996), is the idea that Somali is based on an accent and stress system referred to as *mora-timed*. The mora, or vowel, determines the prosody and involves counting those rather than syllables and includes complex rules for vowel weight, fronting, and reduplication. Evidently, the important information in the case of Somali is that Somali mora-timing is different from the stress timing of English. Since many Somali speakers in this program have spoken English for quite some time,



participants in this group may not experience a lot of difficulty in adapting to English stress or pitch.

Three other participants came from three different language groups initially and are of interest to note. Mandarin, Slovak, and Vietnamese represent those languages. According to Avery & Ehrlich (2005), Mandarin has many one-syllable words and a different pitch allocation from English such that speakers of Mandarin may encounter difficulty with words of more syllables and may need to adjust to a different purpose in pitch. Avery & Ehrlich do not address the Slovak language specifically, but when discussing Polish consider Slovak as part of the Slavic language group. They indicate that Slovak may have a similar stress pattern as Polish which is fixed on the syllable that is second to the last. They also indicate that Polish is syllable-timed so a different stress relationship exists. The third language different from the predominant Somali, Vietnamese, has many one-syllable words and the language is mainly syllable-timed resulting in the need for extra practice in words with more syllables. Also, like Mandarin, Vietnamese has different purposes for pitch change than English (Avery & Ehrlich, 2005). Although the foregoing discussion of initial language differences from English is of interest to this researcher, no special provisions were implemented for these differences for ELLs in the intervention. Pronunciation instruction within regular English classes for ELLs doesn't usually focus on individual adaptations for ELLs in ABE unless the class is specifically a pronunciation only class. Most instruction is typically directed to the whole class regardless of first language. It was generally hoped that simple explicit instruction in hearing and practicing stress and pitch on focus words would be sufficient for this group.

## **Uptake sheet**

The first of the qualitative instruments is the uptake sheet. That instrument was administered on a day of lower attendance. Consequently only nine participants completed the uptake sheet. That sheet sought subjective information from the participants regarding what they felt they had learned through the majority of the intervention. The first question was regarding pronunciation in general. It was an open ended question, “What have you learned about **pronunciation**?” Two related questions asked from where they had been told about it (pronunciation). Choices given in the question were teacher, classmate, or book. The second related question asked if the information had been new to them. Responses to the first question on the uptake sheet about pronunciation are tabulated below in table 4.3:

Table 4.3

*First Question Responses—Uptake Sheet*

Pseudonym	What have you learned about <b>Pronunciation?</b>	Who said it? Teacher, book classmate?	Was this new to you?
Abdirisak	Words, stressed focus syllable	teacher	yes
Aicha	stress focus syllable	teacher	yes
Tien	How I form Words. How I letter Sound	Charly	yes
Faisa	Stress	teacher	yes
Ming	Syllables Stress Rhythm	the teacher	yes
Amina	Stress and stress	teacher	yes
Najma	Syllables stress,	the teacher	yes
Petra	about stress And pitch, Thought groups Focus word in sentences, about syllables	teacher	yes
Fardus	syllables, stress	left blank	left blank

The majority of the responses contained comments indicating learning more about syllables and syllable stress. This response may have been influenced by the recent pre-

intervention review on word stress and sentence stress. One participant listed rhythm and one noted thought groups. One follow-up question mostly yielded the teacher as provider. All but one respondent answered yes to the question asking if the information learned had been new to them, that one respondent left the blank open. On the question inquiring about the placement of new information in the sentence six participants gave an answer indicating “end” which could be interpreted to mean placement at the end of the sentence. For this question, only three participants responded overall with the answer of teacher as being the source of new information placement in a sentence. Four filled in the last column by indicating yes as this information being new to them. The results of the second major question of the uptake sheet are below in table 4.4.

Table 4.4

*Second Question Responses – Uptake Sheet*

Pseudonym	What have you learned about the placement of new information in a sentence?	Who said it? A teacher, a classmate or book?	New to you?
Abdirisak	syllable—end	Teacher	yes
Aicha	It comes at the end of the sentence.	left blank	yes
Tien	at the end	teacher, book	yes
Faisa	It comes at the end of the sentence.	teacher	yes
Ming	to make the vowel longer in the stressed syllable of the focus words	left blank	blank
Amina	focus word at end of sentence	blank	blank
Najma	give the word more expression or focus words	blank	blank
Petra	focus changes, put attention to a new thought, add more information	blank	blank
Fardus	focus word at end	blank	blank

Of note is that particular instrument was administered on a day when several students were absent. Both researcher and volunteers helped to interpret the questions asked, but also tried not to influence responses. It may be added that answering open ended inquiries of this nature present difficult writing situations for ELLs at this level.

## **Likert Scale**

The final data collection tool was a Likert questionnaire designed to elicit participants' reflections about what they had learned. Although Mackey and Gass (2005) do not explicitly define a Likert scale as either a qualitative or quantitative instrument, the tool can be looked at from two perspectives. The participants' perceptions of learning the target pronunciation skill can be viewed as qualitative while the tabulated results may be seen as quantitative. Adding up the number of participants' checks in the "agree a lot" column of this instrument after collection, but before scoring the post-test, yielded 13 checks for reflection 1, 11 checks for reflection 2, and nine checks for reflection 3. These tabulated results constitute quantitative results of the Likert scale.

Table 4.5 below indicates tabulated results of the Likert scale from thirteen participants.

Table 4.5

*Tabulated responses of Likert scale*

Questions 1-4	Agree a lot	Agree a little	Disagree a little	Disagree a lot
#1-I can now hear the changes in sound in sentences when a speaker expresses greater stress or pitch on the most important words.	13	0	0	0
#2-I am more aware of how these changes in sound can affect what the speaker means.	11	1	1	0
#3-When I read out loud, I can use stress and pitch to let listeners know what I think the author's most important words are.	9	2	2	0
#4-Knowing more about differences in stress and pitch helps me better locate the focus word and meaning and better understand what I read.	0	12	1	0

The above constitutes the presentation of qualitative assessments in this study.

What follows is a discussion of outcomes of the intervention.

### **Discussion**

This intervention with accompanying quantitative and qualitative data collection yielded interesting information. The results of the focus-word identification task from pre-test to post-test are favorable. All participants either remained at 100% accuracy or improved accuracy. Only two participants did not reach 100% on the focus-word identification task of the post-test. The decrease in scores in the inference-identification

task from the pre-test to post-test may appear disappointing. However, comparison of the pre-test and post-test sentence length and complexity could have significantly mitigated possible higher scores on the post-test. On question one of the uptake sheet regarding suprasegmental pronunciation features, three participants yielded language regarding focus word, an additional five expressed words related to syllable stress while only one mentioned skills closer to segmental pronunciation. Those responses related to suprasegmental pronunciation features seem positive in view of possible vocabulary retrieval difficulties for this level of student. The second question of the uptake sheet asking for feedback on syntactical placement of new information was positive also. Six of the nine participants responding indicated language mentioning “end”, perhaps meaning the location of the new information was at the end of the sentence. The results of the Likert scale questionnaire indicating that participants perceived that they had learned more about locating prominence may indicate that participants came away from the intervention with increased knowledge of listening for pitch and stress. This increased awareness of this feature of English pronunciation may contribute to a greater comprehension of new information, but not definitively.

### **Observations**

In addition to information from qualitative instruments, my overall observation of participant willingness to become participants initially was greatly encouraging. Even during the process of informing students about the study and subsequent signing of consent forms, students appeared very interested. Furthermore, students became participants to a much greater degree than anticipated. Participation continued through attendance with student completion of all data collection requested in addition to positive



reaction and engagement during classroom activities. Some are very interested to know the results of the pre-test and post-test.

Different from my overall observations, one specific observation is worth noting. As mentioned earlier in these results, Ibrahim made a significant improvement on the post-test of the inference identification task. I noticed and heard him practicing intonation with prominence during one of the practice lessons during the intervention. He was the only participant observed by me for that practice. Other anecdotal information obtained from his teacher indicated that he had not done well last year in reading. When I told her of his success on the post-test, she informed me that he had since progressed on his CASAS reading test.

### **Summary**

This study began by asking: *Can teaching listening for prominence in combination with reading help students determine new information?* This chapter has discussed results of the study. Information has been presented about both quantitative and qualitative results. Discussion has been provided regarding combined results of these data. Researcher observational input has also been included. Chapter Five, the conclusion of this study, contains a discussion on study findings in relation to the literature review, study limitations, and implications for further research and classroom application. Personal comments regarding my feelings about this study conclude.

## CHAPTER FIVE

### Conclusion

This study began by attempting to understand a greater connection between fluency and reading comprehension. Exploration led me to study the linguistic components of fluency by asking: *Can teaching listening for prominence in combination with reading help students determine new information?* Chapter Five includes a summary of study findings, research limitations, implications for further research, and classroom teaching. A few personal comments conclude the chapter.

### Summary of Study Findings

The purpose of this action research study was to learn more about the connection between reading fluency and comprehension of new information. Research supporting the need for strategies and further study of adult reading comprehension was consulted in, and provided by, NICHD (2000), Curtis and Kruidenier (2005), McShane (2005) and Pimentel (2013). Both quantitative and qualitative tools were employed during this study to reflect research from a syntactical, phonological, and pragmatic perspective.

### Quantitative Findings

**Support for syntax.** Beginning with syntax, quantitative pre- and post-test assessments were teacher/researcher designed following and supporting studies that indicated new information is structured later in a sentence from Haviland and Clark (1974), Bock and Mazzella (1983), Cowles (2003), and Carlson et al. (2009). The

content of the pre- and post-test tools also supported concepts of the need for given information in the text to be accessible to readers Cowles (2003) and Baumann and Grice (2006). Although previously known, or given, content to participants was not known, life-skill situations common in ABE were used to provide background for both the focus-word identification and the inference identification tasks of the quantitative tools. The inconclusiveness of the inference identification portion of the post-test assessment generally did not support identification of the correct inference. For three participants, however, support was shown. The greatest increase of percentage correct on the inference identification task was shown by Ibrahim whose increase realized a 50% gain. Aichas and Abdirasak's gains were 20% and 10% respectively. These increases may indicate additional gains if further studies are conducted.

**Support for phonology.** From a phonological perspective, the findings of the focus-word identification task support the use of prominence as part of intonation and prosody in increasing reading fluency for the purpose of improved reading comprehension. Writers such as McShane (2005) and Pikulski and Chard (2005) conclude that there is an interrelated connection between reading fluency and reading comprehension in that each aids the other. However, as shown by a study by Trofimovich et al. (as cited in Piske, 2012), time may be needed for this connection to be shown. The concept of implicit prosody as studied by Stolterfoht et al. (2007) may also be connected with the need for fluency in that the ongoing practice of out-loud reading fluency may be needed to develop the mental ability of hearing in one's mind as to where prominence is while reading silently.

Although the support for listening for prominence in reading comprehension was not conclusive, more immediate support may be seen in terms of gains in pronunciation, specifically in support of gains in listening for prominence. Findings of participants listening for pitch changes, increased loudness, or stress on the most prominent syllable or syllables support the body of work by Gussenhoven (2004) who analyzed these features of suprasegmental phonology. This researcher also experienced some of the biological codes attributed to Gussenhoven (2004) when recording the listening parts of the focus word identification tasks for participants. Regulating my breathing, choosing the pitch range, and using clear articulation were employed to help the listener attend to syllables within words indicating prominence.

**Support for pragmatics.** Direct support for the concepts of pragmatics was not indicated in this study. For this researcher, however, it was interesting to find the somewhat common ground from a syntactical structure perspective (Cowles, 2003), a phonological perspective through Effort Code (Gussenhoven, 2004), and a pragmatic perspective through Relevance Theory (Sperber and Wilson, 1994). This common ground would be the cognitive efforts used by interlocutors in the exchange of information and meaning.

### **Qualitative Findings**

**Support for syntax.** Support for syntax through the qualitative tools comes from the uptake sheet. The question asking participants' written feedback on the placement of new information in a sentence yielded responses from six of nine participants that indicated placement of new information is located at or near the end of a sentence. These responses support the early work of Bock and Mazzella (1983). Their experiments

showed the use of syntactic placement near the end of the sentence aided in faster processing of new information. The work of Cowles (2003) is also supported in that she refers to the usual syntactic placement of new information in an information structure that helps understanding. She conducted experiments in which evidence was found that cognitive understanding is influenced by information structure. Further support was also provided from the uptake sheet for a study conducted by Carlson et al. (2009). They provided evidence from perception experiments to discern if the typical placement of new information was preferred to intonational focus. Carlson et al. (2009) also indicated that intonational prominence can make a significant difference in the choice of preference but concluded that structural placement of new information near the end of a sentence was preferred. They did concede, however, that prominence may sometimes influence selection of the most important information. Their position that prominence can influence choices for new information helps segue into the phonological perspective of new information.

**Support for phonology.** Qualitative support for phonology comes from the uptake sheet question inquiring, “What have you learned about pronunciation?” Of the nine participants who responded to this question on the uptake sheet, eight wrote words indicating that they learned concepts of stress on syllables: the syllable-focused, rhythm, pitch, or thought groups. Of the eight who gave those responses, seven indicated that they had learned this information from the teacher and that the information was new to them. These responses support the writing of Parrish (2004) which relates that some ELLs may be unintelligible due to the lack of formal teaching in pronunciation. Several authors also write of the need to teach suprasegmentals for intelligibility (Avery and

Ehrlich, 2005; Derwing and Rossiter as cited in Celce-Murcia et al., 2010; Gilbert, 2010). It could be construed from these writers that this teaching of suprasegmentals may be an imperative for ELL teachers.

**Support for the importance of perception.** The final data collection tool, the Likert Scale, yielded responses indicating participants' perceptions of their learning. 13 participants completed the Likert Scale. There were 13 "agree a lot" responses indicating that they could now hear the change in pitch or stress on important words. 11 of the 13 "[agreed] a lot" with their awareness that these changes in stress or pitch could change the speaker's meaning. Nine of the 13 participants "[agreed] a lot" that they could now use stress and pitch to let listeners know when reading what they thought the author's most important words were. 12 of the 13 "[agreed] a little" that knowing more about differences in stress and pitch helped them locate the focus word and subsequent meaning. These responses indicating participants' perception of the acquisition of target skills support research from studies on the significant role of perception in pronunciation.

The perception of increased awareness of hearing prominence supports the study by Flege et al. (1999) in which they concluded that there is a correlation between the perception of sound, in their study vowel sounds, and later production of those sounds. It would seem likely that the perception of the knowledge of the hearing prominence could also be used in predicting the production of prominence.

The findings in my study of participants' perception responses as indicated above from the Likert Scale also support the neuroscientific work of Watkins et al. (2003). Their research found that hearing speech and watching speech-related lip movements showed brain responses that activate speech production.

Kissling (2014) reports from her study that student perceptions of having learned a target skill are an important predictor of production of that skill. Although from a Spanish EFL context, Kissling advocates that teachers provide time when beginning instruction of a language to allow students to fine tune their understanding of the sounds associated with that language.

From the results in Chapter Four of this study it can be seen that, except for two participants out of 13, most achieved perfect scores on the focus-word identification task after hearing speech with prominence on the most important word. In addition, the reflections representing participants' perceptions of having learned the target skill as shown on the Likert Scale indicate that, when coupled with studies regarding the importance of perception in language learning, one could predict with some certainty that successful production of producing prominence in the future is likely. Results from the inference-selection task showed that one participant made a significant gain while two others showed smaller gains. Some concepts in the discussion of research limitations and implications for future research, as follows, could perhaps further define inference selection results.

### **Research Limitations**

As noted earlier under methods, the results of this quasi-experimental study cannot be generalized because it only included a small, non-random group of participants. Perhaps only through lots of replication could several teachers achieve some generalization.

Another limitation is the fact that teacher and researcher were the same. This situation can lead to bias on the part of the researcher. In addition, no outside rater was

employed to add input to instrument creation. Subjective observations were largely from the teacher throughout the intervention. Irregular attendance also added a limitation as for both the pre-test and post-test some students were absent. Follow up testing was provided for participants absent for pre or post-tests. Absences also contributed to a reduced number of completed uptake sheets which may have had a marginal effect on results. Of no small import were absences during intervention lessons resulting in the need for extended review to help ensure more understanding. Some of these limitations may be addressed in the following section.

### **Implications for Further Research**

Further research attempting replication may lead to a cumulative generalization. The issue remains, however, that each replication could have its own variabilities. It very reasonably could be asked if better instrument design could be achieved through participation with a co-researcher, or an outside rater. An outside rater perhaps would have noticed differences of items in the post-test and provided input accordingly, resulting perhaps in a more positive increase in the number of correct choices of the inference-identification items. Certainly having an outside rater to listen to the pre-recorded statements may have been helpful, too. Other questions remain for this researcher. Could having more time available for the participants to practice determining intonation phrases and selection of prominence on their own provide an opportunity for more progress in fluency? How much more time would lead to participants approaching a sufficient analytical base of phrase marking to yield faster progress in fluency? These questions remain unanswered.



### **Implications for Classroom Teaching**

Teaching the underpinnings of expressive reading and speech may be one of the most important aspects of teaching suprasegmentals for ELLs in adult education. This area of pronunciation education can not only be an aid for greater understanding of listening, but can also lead to greater intelligibility of ELLs as they practice fluent reading. Pronunciation instruction is provided in adult ESL classes. However it lacks a dominant role in adult ESL English instruction. I have observed that teachers do happily help with pronunciation when requested by students or as the need arises. Federal and state required assessments for progress in adult programs currently have no tests for speaking. Listening tests are utilized greatly, but how long these assessments will be available remains unknown. No information has been provided at this writing regarding extension or replacement.

Fortunately for the STAR reading program I teach, my observation is that teaching students about how prominence is expressed can strengthen the connection between pronunciation and reading prosody or fluency. During my seven to eight years of teaching STAR, many students have come to me not knowing what expression is or what reading expressively is. Hearing students express stress and pitch to make known important speaker or author meanings is gratifying. I plan to teach ESL STAR indefinitely and hope to incorporate more student engagement with text through identifying intonation contours and determining prominence within those contours.

### **Final Comments**

The instructional interventions in this study designed to improve ESL students' ability to identify prominence within intonation contours appeared to have indeed raised the participants' awareness of this feature. It was a study for this researcher to answer the burning question of how prosody or fluency in reading can influence comprehension. Learning more deeply about pronunciation of suprasegmentals, syntax in new information, and also phonology and pragmatics and how they come together to contribute to meaning was an exciting academic experience. In closing, it is my intent to offer assistance to other teachers who may choose to expand on the concepts learned in this study. Continued participation in discussions of concepts encountered during this endeavor would also be welcome.

## REFERENCES

- American Rhetoric. <http://www.americanrhetoric.com>. Last accessed 30 October 2016.
- Avery, P. & Erlich, S. (1992). *Teaching American English Pronunciation*. Oxford: Oxford University Press.
- Balog, H. L. (2012). Early prosodic production: Pragmatic and acoustic analyses for L2 language learners. In J. Romero-Trillo (Ed.), *Pragmatics and prosody in English language teaching* (pp. 133-146). *Educational Linguistics v. 15*. doi: 10.1007/978-94-007-3883-6\_9
- Baumann, S. & Grice, M. (2006). The intonation of accessibility. *Journal of Pragmatics*, 38, 1636-1657. doi: 10.1016/j.pragma.2005.03.017
- Binder, K.S., Tighe, E., Jiang, Y., Kaftanski, K., Qi, C., & Ardoin, S. P. (2013). Reading expressively and understanding thoroughly: An examination of prosody in adults with low literacy skills. *Reading and Writing: An Interdisciplinary Journal*, 26(5), 665-680. doi: 10.1007/s11145-012-9382-7
- Bock, J. K., & Mazzella, J. R. (1983). Intonational marking of given and new information: Some consequences for comprehension. *Memory & Cognition*, 11(1), 64-76. doi: 10.3758/BF03197663
- Bolinger, D. (1986). *Intonation and its parts: Melody in spoken English*. Stanford, CA: Stanford University Press.

- Burt, M., Kreeft Peyton, J., & Van Duzer, C. (2005). How should adult ESL reading instruction differ from ABE reading instruction? *Center for Adult English Language Acquisition*. Retrieved from [http://www.marshalladulthoodeducation.org/pdf/briefs/How\\_Should\\_ESL\\_Reading\\_Instruction\\_Differ\\_from\\_ABE\\_Reading\\_Instruction.pdf](http://www.marshalladulthoodeducation.org/pdf/briefs/How_Should_ESL_Reading_Instruction_Differ_from_ABE_Reading_Instruction.pdf)
- Carlson, K., Dickey, M. W., Frazier, L., & Clifton, C. Jr. (2009). Information structure expectations in sentence comprehension. *The Quarterly Journal of Experimental Psychology*, 62 (1), 114-139. doi: 10.1080/1747021070188017
- Celce-Murcia, M., Brinton, D.M., Goodwin, J.M., & Griner, B. (2010). *Teaching pronunciation: A course book and reference guide* (2<sup>nd</sup> ed.) New York, NY: Cambridge University Press
- Celce-Murcia, M. & Larsen-Freeman, D. (1999) *The grammar book: An ESL/EFL teacher's course* (2<sup>nd</sup> ed.) New York: Heinle & Heinle Publishers.
- Cowles, H. W. (2003). *Processing information structure: Evidence from comprehension and production* (Doctoral Dissertation). University of California, San Diego. Retrieved from [uf-lclab/wp-content/uploads/2012/01/Cowles2003-Complete.pdf](http://uf-lclab/wp-content/uploads/2012/01/Cowles2003-Complete.pdf)
- Chafe, W. (1988). Punctuation and the prosody of written language. *Written Language*, 5 (4), 395-426. Retrieved from [wcx.sagepub.com](http://wcx.sagepub.com)
- Clark, R.C. & Yorkey, R. (2011). *Teaching North American English pronunciation: A brief introduction with photocopyable handouts*. Brattleboro, VT: Pro Lingua Associates.
- Cole, P. (Ed.) (1981). *Radical pragmatics*. Urbana, IL: University of Illinois at Urbana.

- Curtis, M.E. & Kruidenier, J.R. (2005). *Teaching adults to read: A summary of scientifically based research principles*. Washington, D.C.: National Institute for Literacy.
- Daly, A. (2009). Teaching prosody through Readers Theatre (Master's thesis). Available from [www.hamline.edu](http://www.hamline.edu)
- Donati, C. & Nespor, M. (2003). From focus to syntax. *Lingua*, 113 (11). doi:10.1016/S0024-3841(03)00015-9.
- Dowhower, S. L. (1991). Speaking of prosody: Fluency's unattended bedfellow. *Theory into Practice*, 30(3), 165-175. Retrieved from <http://www.jstor.org/stable/1476878>
- Flege, J. E., MacKay, I. R. & Meador, D. (1999). Native Italian speakers' perception and production of English vowels. *The Journal of the Acoustical Society of America* 106(5), (1999): 2973-2987. Retrieved from Google Scholar February 26, 2017
- Gilbert, J. B. (2005). *Clear speech pronunciation and listening comprehension in North American English*. New York, NY: Cambridge University Press.
- Griffin, S. M. & Rounds, P. L. (1992). Reading aloud: A useful learning tool?. *ELT*, 62 (1), 29-36. doi: 10.1093/elt/ccm075
- Grundy, P. (2008). *Doing pragmatics*. London: Hodder Education.
- Gussenhoven, C. (2004). *The phonology of tone and intonation*. Cambridge, UK: Cambridge University Press.
- Gutiérrez Diez, F. (2012). Trouble spots in the learning of English intonation by Spanish speakers, tonality and tonicity. In J. Romero-Trillo (ed.), *Pragmatics and prosody*

in English language teaching (219-230). *Educational Linguistics*, 15.

doi:10.1007/978-94-007-3883-6\_13

Haviland, S. E. & Clark, H. H. (1974). What's new? Acquiring new information as a process in comprehension. *Journal of Verbal Learning and Verbal Behavior*, 13, 512-521. doi: 10.1016/S0022-5371(74)80003-4

Kelly, K. & Sparks, J. (2016, January). *CCRS standards in reading a through e!* Workshop presentation. 2016 Language and Literacy Institute. Minnetonka, MN ABE Teaching & Learning Advancement System (ATLAS) Hamline University.

Key, J. P. (1997). Qualitative research, module r14. *Research Design in Occupational Education*. Retrieved from

<http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/newpage21.htm>

Kissling, E.M. (2014). What predicts the effectiveness of foreign-language pronunciation? investigating the role of perception and other individual differences. *The Canadian Modern Language Review/La Revue Canadienne Des Langues Vivantes*, 70(4), 532-558. Abstract retrieved from

<http://ezproxy.hamline.edu>:

2048/login?url=http://search.proquest.com.ezproxy/hamline.edu:2048/docview/1684415530?.accountid=28109

LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293-323.

Lamberti, M. (1991). Cushitic and its classifications. *Anthropos*, 86 (4-6), 552-561.

Retrieved from <http://www.jstor.org.ezproxy.hamline.edu>. 2048/stable/40463677.

- Lengeris, A. (2012). Prosody and second language teaching: Lessons from L2 speech perception and production research. In J. Romero-Trillo (ed.), *Pragmatics and prosody in English language teaching* (25-40). *Educational Linguistics* 15. doi: 10.1007/978-94-007-3883-6\_3
- Mackey, A. & Gass, S. M.(2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- McShane, S. (2005). *Applying research in reading instruction for adults: First steps for teachers*. Washington, D.C.: National Institute for Literacy.
- Mellard, D.F., Fall, E.E., & Woods, K.L. (2013). Relation and interactions among reading fluency and competence for adult education learners. *Learning Disabilities Research & Practice*, 28, 70-80. doi: 10.1111/ldrp.12008.
- Miller, J., & Schwanenflugel, P. (2008). A longitudinal study of the development of reading prosody as a dimension of oral reading fluency in early elementary school children. *Reading Research Quarterly*, 43(4), 335-354. doi: 10.1598/RRQ.43.4.2
- National Institute for Child Health and Human Development (NICHD). (2000). *Report of the National Reading Panel. Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its publications for reading instruction: reports of the subgroups*. (NIH Publication No. 00-4754). Washington D.C.: U.S. Government Printing Office. Retrieved from <http://www.nichd.nih.gov/publications/nrp/upload/ch3.pdf>
- Nilsenová, M., & Swerts, M. (2010). Prosodic adaptation in language learning. In J. Romero-Trillo (Ed.), (pp. 77-94), *Pragmatics and prosody in English language teaching*. *Educational Linguistics* 15, doi: 10.1007/978-94-007-3883-6\_6

- Orwin, M. (1996). A Moraic Model of the Prosodic Phonology of Somali. *African Languages and Cultures Supplement*, (3), 51-71. Retrieved from <http://www.jstor.org.ezproxy.hamline.edu:2048/stable/586653>  
Stable URL: <http://www.jstor.org/stable/586653> Accessed: January 15, 2017.
- Parrish, B. (2004). *Teaching adult ESL: A practical introduction*. New York, NY: McGraw-Hill.
- Pikulski, J.J., & Chard, D. J. (2005). Fluency: bridge between decoding and reading comprehension. *The Reading Teacher*, 58 (6), 510-519. doi: 10.1598/RT.58.6.2
- Pimental, S. (2013). U.S. Department of Education, Office of Vocational and Adult Education. *College and career readiness standards for adult education*. Washington, D.C., 2013: MPR Associates, Inc. Retrieved from [lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf](http://lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf).
- Piske, T. (2012). Factors affecting the perception and production of L2 prosody: Research results and their implications for the teaching of foreign languages. In J. Romero-Trillo (Ed.), *Pragmatics and prosody in English language teaching. Educational Linguistics v. 15*. doi:10.1007/978-94-007-3883-6\_4
- Prince, E. F. (1981). Toward a taxonomy of given-new information. In P. Cole (Ed.), *Radical Pragmatics* (pp. 223-254). New York, NY: Academic Press, Inc.
- Rasinski, T. V., Padak, N.D., McKeon, C. A., Wilfong, L. G., Friedauer, J. A., & Heim, P. (2005). Is reading fluency a key for successful high school reading? *Journal of Adolescent & Adult Literacy*, 49(1), pp22-27. doi:10.1598/JAAL.49.1.3
- Riesco-Bernier, S. (2012). Same but different: the pragmatic potential of native vs. non-native teachers' intonation in the EFL classroom. In J. Romero-Trillo (Ed.),



Pragmatics and Prosody in English Language Teaching (pp. 171-197).

*Educational Linguistics v 15*. doi:10.1007/978-94-007-3883-6\_11

Romero-Trillo, J. & Newell, J. (2012). Prosody and feedback in native and non-native speakers of English. In J. Romero-Trillo (Ed.), *Pragmatics and prosody in English language teaching*, (pp.117-131). *Educational Linguistics v 15*. doi:10.1007/978-94-007-3883-6\_8

Schwanenflugel, P.J. & Benjamin, R. G. (2012). Reading expressiveness: The neglected aspect of reading fluency. In Rasinski, Blachowicz, & Lems (Eds.) *Fluency instruction: Research-based best practices* (pp. 35-54). New York, NY: Guilford Publications, Inc.

Stolterfoht, B., Friederici, A. D., Alter, K., & Steube, A. (2007). Processing focus structure and implicit prosody during reading: differential ERP effects. *Cognition*. 104 (3), 565-590. doi. 10.1016/j.cognition.2006.08.001.

Southwest ABE. <http://www.southwestabe.org>. Accessed October, 2016.

Stayter, F. Z. & Allington, R. L. (1991). Fluency and the understanding of texts. *Theory into Practice*, 30 (3), 143-148. Retrieved from <http://www.jstor.org/stable/1476875>

Stewart, Jr., T. W. & Vaillette, N. (8<sup>th</sup> ed. Eds.). (1981). *Language files: Materials for an introduction to language and linguistics*. Columbus, OH: Ohio State University Press.

Watkins, K. E., Strafella, A. P., & Paus, T. (2003). Seeing and hearing speech excites the motor system involved in speech production. *Neuropsychologia*. 41, (2003): 989-994. Retrieved from Google Scholar February 26, 2017.

Welch-Ross, M. K., & Lesgold, A. M. (2012). Improving adult literacy instruction:

Options for practice and research. Washington, D.C.: The National Academies

Press.

Whalley, K. & Hansen, J. (2006). The role of prosodic sensitivity in children's reading development. *Journal of Research in Reading*, 29 (3), 288-303.

doi:10.1111/j.1467-9817.2006.00309.x

**APPENDIX A**

**Questionnaire**

Name \_\_\_\_\_ Date \_\_\_\_\_

1. What was the name of the language you used as a child when you started to speak? \_\_\_\_\_

2.a. Have you had teaching in English pronunciation?

Yes \_\_\_\_\_ No \_\_\_\_\_

2.b. Can you tell about the teaching of English pronunciation you had?

---

---

3. Have you had teaching of English in classes where you learned about saying some words with a higher or lower tone, something like music?

Yes \_\_\_\_\_ No \_\_\_\_\_

4. Have you had teaching of English pronunciation in classes where you learned about the focus word?

Yes \_\_\_\_\_ No \_\_\_\_\_

**APPENDIX B**

**Pre-Test and Post-Test**

### Pre-Test Teacher Copy

The following pre-test items will be recorded on a computer recording program called Praat. The students will hear the sentences with intonation on the prominent word/s or focus word/s. Students will receive the opportunity to hear the sentences played as much as needed. Teacher and volunteers will circulate to monitor understanding of directions, but not help with the answers. After circling their choice of focus word, students will choose one of three options for the correct inferential meaning of the recorded sentence/s.

1. I went to Good Food grocery store recently; it was CLOSED.

Possible inferences:

- a. The speaker went to the store too early.
- b. The store had gone out of business.
- c. Grocery items were being moved inside the store.

2. The students' trip to the park is planned for the last day of school, unless it RAINS.

Possible inferences:

- a. Students will go to the park no matter what the weather.
- b. The students will not go to the park.
- c. The students will go to the park if the weather permits.

3. Suleka planned her child's check-up for June. The child's doctor is a GOOD pediatrician.

Possible inferences:

- a. The child's doctor only sees patients in June.
  - b. Many parents take their children to the doctor in May.
  - c. The child's doctor is popular and his/her schedule fills up quickly in June.
4. Ali was called into work early this morning. He had to CANCEL his coffee with Abdi.

Possible inferences:

- a. Ali went to the coffee shop with a different person.
  - b. Ali was disappointed that he couldn't have coffee with Abdi.
  - c. Ali told his employer that he couldn't come in to work that morning.
5. There is a sale at the electronics store today. Televisions are marked down by FIFTY percent.

Possible inferences:

- a. The store dropped prices a little on all their televisions.
  - b. The store dropped prices a lot on all their televisions.
  - c. The store will sell televisions at half price.
6. The neighborhood community center is having classes to teach children T-Ball. Kids will have lots of FUN.

Possible inferences:

- a. Children will be tested on their knowledge of T-Ball.

- b. Children will enjoy themselves playing T-Ball.
  - c. Children will go to classes anytime.
7. To attend adult education classes, students must REGISTER.

Possible inferences:

- a. Students can walk into class anytime.
  - b. Students can see the teacher of the class they want.
  - c. Students can make an appointment with the registrar.
8. Jose is going to see his doctor again soon. He has been told to MONITOR his blood pressure.

Possible inferences:

- a. Jose's blood pressure has been going up and down for some time.
  - b. Jose will talk to his doctor about the cost of buying a blood pressure cuff.
  - c. Jose will bring a notebook in which he has written his blood pressure results taken three times a day.
9. Thevaraja's father is glad to be in the United States on a work visa.

He has been hired by Target as a COMPUTER ENGINEER.

Possible inferences:

- a. His father wants to be a professor in the United States.
- b. Thevaraja hopes to go to college in the United States.
- c. Thevaraja's father was an excellent student of computer engineering in India.



10. The neighborhood in which Maria lives often has groups of young men and women standing around on corners smoking. Maria doesn't want her children to join them. She has been very active in forming a neighborhood WATCH.

Possible inferences:

- a. The neighbors take turns keeping track of any activity around intersections in their neighborhood.
- b. The neighbors gather for coffee or tea at 10:00 in the morning.
- c. The neighbors want to start a food truck so that food can be provided for the smokers.

### **Student pre-test**

Directions: Circle the most important word/s you hear in each sentences after listening to the recording. Do not choose until you have listened to the sentence/sentences. You may also read along with the recording. There are two steps to each item. Step one is to circle the word or words that you hear are stressed. The second step is to circle the meaning (a, b, or c) that best matches why you think the recording stressed where it did. Do not say your answers out loud or share your answers with another student.

Pre-test items are as in the teacher copy, but without capital letters designating focused word/s.

### Post-Test Teacher Copy

The following post-test items will be recorded on a computer recording program called Praat. The students will hear the sentences with intonation on the focus word/s. Students will receive the opportunity to hear the sentences as much as needed. Students will also be given time to circle their choice of focus word. Teacher and volunteers will circulate to monitor understanding of directions, but not to help the students with the answers. After circling their choice of focus word, students will choose one of the three options for the correct inferential meaning of the sentence.

1. Mrs. Garcia went to the grocery store in the afternoon. She wanted to fix chicken enchiladas for supper. They didn't have any FRESH chicken in the store.

Possible inferences:

- a. The truck bringing the chicken hadn't arrived yet.
  - b. Mrs. Garcia couldn't wait for chicken to defrost.
  - c. Mrs. Garcia prefers using only fresh chicken.
2. The children were excited to start school again, until they found out they were getting MRS. JONES this year.

Possible inferences:

- a. Mrs. Jones was known to give the students lots of homework.
  - b. Mrs. Jones was known to bring treats to school for students.
  - c. Mrs. Jones was known to have a substitute teacher a lot.
3. Mr. Osman went to see his doctor yesterday. The bad fat in his blood had inCREASED.

Possible inferences:

- a. Mr. Osman can now eat more steaks and hamburgers with fried potatoes.
- b. Mr. Osman can now discontinue his medicine for high cholesterol.
- c. Mr. Osman can now eat more fruits, vegetables, and salads.

4. There is a new manager at Hassan's job. He really wants employees to arrive ON TIME.

Possible inferences:

- a. The new manager changed the time on the time clock so employees arriving late would be allowed an extra five minutes.
- b. The new manager told employees that anyone clocking in late eight minutes or more would have their work time reduced by fifteen minutes.
- c. The new manager said he will pay employees at their regular start time even if they are ten minutes late.

5. I've misplaced my cell phone. I hope I can get help FINDing it.

Possible inferences:

- a. The speaker is asking the listener/s for help finding his cell phone.
- b. The speaker is looking everywhere for his cell phone.
- c. The speaker doesn't expect anyone to help him find his cell phone.

6. One of Tom's neighbors in the apartment building is an elderly woman. Once a week she carries a heavy bag of groceries from the elevator down a LONG hallway. What can Tom do?

Possible inferences:

- a. Tom can offer to help her carry the groceries to her apartment door.
  - b. Tom can report her to social services because she is living alone.
  - c. Tom can call the apartment manager to come up to help her.
7. Qatra shops at Neighborhood Drug Store for the vitamins she likes. This week the store has a special on that brand; it's a BOGO offer!

Possible inferences:

- a. Qatra can wait until next week and still expect to get that sale.
  - b. Qatra can wait until she is out of the vitamins and then get them on sale.
  - c. Qatra can look at her budget and buy as many containers as she has money.
8. Sandy received a call from her child's teacher asking them to come in for CONferences.

Possible inferences:

- a. Her child has not been turning in her homework.
  - b. Regular conferences are scheduled for next week.
  - c. Her child has been doing very good work in school.
9. Mary joined Weight Watchers last week. Her doctor told her she needs to lose FIFty pounds.

Possible inferences:

- a. Mary wants to lose weight so she can buy a new dress.
- b. Mary wants to weigh herself during the time of day when she eats.
- c. Mary wants to lose weight to help prevent future health problems.

10. Hassan has been looking forward to taking a road trip to see relatives near Chicago. He wants to have a week off work in July. On June 25 he learned that he is scheduled to work the enTIRE month of July.

Possible inferences:

- a. Hassan must work all 31 days in July.
- b. Hassan must request time off from work in advance.
- c. Hassan must call in sick with the flu for that week he is going to Chicago.

### **Post-Test Participant Copy**

Directions: Circle the most important word/s you hear in each sentence after listening to the recording. Do not choose until you have listened to the sentence/sentences. You may also read the sentences along with the recording. There are two steps to each item. Step one is to circle the word or words that you hear are stressed. The second step is to circle the meaning (a, b, or c) that best matches why you think the recording stressed where it did. Do not say your answer out loud or share with another student.

Post-test items are as in the teacher copy, but without capital letters designating focused word/s.

**APPENDIX C****Uptake Sheet**



Name \_\_\_\_\_

Date \_\_\_\_\_

What Have You Seen or Heard About **Pronunciation** or **Grammar**?

	Who said it? Was this from a teacher, classmate or book? Write which one.	Was this new to you? Write yes or no.
<p>What have you learned about <b>Pronunciation</b>?</p>		
<p>What have you learned about the placement of new information in a sentence?</p>		

**APPENDIX D**

**Likert Scale**

**Directions:** For each number sentence below, check **one** box to the right of the sentence. There is no right or wrong answer. Answer according to what you feel you have learned.

Skill	Agree a lot	Agree a little	Disagree a little	Disagree a lot
1. I can now hear the change in sound in sentences when a speaker expresses greater stress or pitch on the most important words.				
2. I am more aware of how a change in sound can affect what the speaker means.				
3. When I read out loud, I can use changes in stress and pitch to let listeners know what I think the author's most important words are.				
4. Knowing more about differences in stress and pitch helps me better locate the focus word and better understand what I read.				