

THE EFFECT OF A READING PROGRAM WITH FOCUSED FLUENCY
INSTRUCTION ON READING COMPREHENSION AND FLUENCY OF ADULT
ESL LEARNERS

by

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Abstract

A large number of adult ESL students in the adult basic education (ABE) system have high school completion or post-secondary education as a goal, but lack the academic reading skills to reach these goals. A common factor among intermediate ESL students in an urban ABE program is low reading fluency. This study examined the effect of 7-12 hours of supplemental reading practice with fluency instruction on: 1) reading fluency, as measured in words correct per minute, and 2) overall reading proficiency as measured by two standardized reading tests.

Eighteen students participated in the six week study – nine in the experimental group that received reading practice, and nine that did not. All participants pre- and post-tested using the CASAS and TABE tests, and they all completed pre- and post-study surveys on their feelings about reading and reading practices.

The study results indicate a few important trends: 1) a program that uses the fluency instructional methods of repeated reading and listening-while-reading is effective in improving reading fluency in adult ESL participants; and 2) reading practice with focused fluency instruction in addition to predicting, vocabulary development, comprehension questions, and follow-up writing, may lead to increased academic reading skills and comprehension as measured by the TABE. Results that indicate that supplemental reading practice may lead to reading more frequently and a wider variety of materials outside of the ESL classroom.

CHAPTER ONE: INTRODUCTION

When I was a child in Somalia, I loved school. My favorite subject was math because my brother taught me before I started going to school. I loved my teachers, and my dream was to become a teacher. When I was in fifth grade, I fled my country because civil war broke out. I went to Kenya, and that was the end of school for me. After six years living in Kenya, I came to the U.S., I got married, and I had children. I took care of our children while my husband studied medicine and became a doctor. I became a citizen in 2003, and now I study English, reading, writing, and math everyday. When I speak English very well I'll get a high school diploma and after that I'll go to college.

This is the education story of Fardos, an adult ESL learner in an Adult Basic Education (ABE) program in Minnesota. Her story is remarkable, but not unique. It is one of thousands of stories of highly motivated students in adult education programs. The adult education system in the United States serves approximately 4 million adults, providing instruction in basic skills education, secondary education for adults, and English literacy for non-native English speakers. Across the country, there is a large and growing number of low-literacy, non-native English-speaking adults who are students in adult education programs. According to the 1999 report from the United States Department of Education, 48% of learners in adult education were learners in English as a Second Language (ESL), the fastest-growing area of adult education. According to 2000 U.S. Census figures, 33% of foreign-born adults 25 years and older didn't complete

high school, versus 13.4% of native-born adults (United States Census Bureau, 2001). According to the National Adult Literacy Survey, of the 40-44 million adults who showed skills in the lowest literacy level, 25% are immigrants learning English as a Second Language (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993).

In Minnesota there are similar trends. According to the U.S. Census, there are currently more than a quarter million Minnesotans – 12% of the adult population – with less than a high school diploma. In fiscal year 2004, over 38,000 ESL learners were served, which is 47% of all Adult Basic Education (ABE) learners (Minnesota Department of Education, 2004). Many of these students have as a goal completing the General Education Development (GED) test here in the U.S. and/or continuing on to post-secondary education.

In the ABE program in Minneapolis where I teach, approximately 530 ESL students, or 46% of the student population served in the last year, didn't finish high school. And of that 46%, approximately 425, or 80% have less than 9 years of education. All of these students are placed in general ESL classes based on a reading score from the Comprehensive Adult Student Assessment System (CASAS) testing. There is a large number of students who enter the system in the lower level of ESL classes and progress into intermediate classes, but stop there. Often, these students are fluent, conversational speakers, but don't have the reading, writing, and general academic skills to progress on to advanced ESL or adult secondary education. They possess strong Basic Interpersonal Communication Skills (BICS), but lack Cognitive Academic Language Proficiency (CALP), as defined by Cummins (1979). This population led to my research interest.

What can educators do to help these students gain the literacy and reading skills necessary for academic success? These students share a few common factors:

- They didn't finish high school in their countries due to interruptions such as the economic situation, family hardship, or civil war.
- They often have lived in the U.S. a long time and have high oral proficiency in English.
- They have reading scores of 215-225 on CASAS (high-intermediate ESL level). According to CASAS, these scores correlate to a 5.0-6.0 grade equivalent (GE) reading level. (CASAS, n.d., Research Reports)
- They score much lower on the reading section of Test of Adult Basic Education (TABE), around 1.0-3.0 GE level.

The discrepancy between the reading levels on these two assessments of this population was another reason contributing to my interest for this study. The CASAS test is designed to assess student's competency in real-life reading tasks – bills, checks, leases, etc. (CASAS, n.d., Competencies). The TABE test assesses students' readiness for academic work and reading, such as identifying the main idea, making inferences, predicting outcomes, and guessing vocabulary meaning from context (McGraw-Hill, 1987). According to Cummins (1994), these *are cognitively demanding* language functions necessary for academic language proficiency. It appears that these students are proficient in reading that is necessary for lifeskills-type reading, but the low TABE scores show that these students appear to struggle with CALP, or “academic-track” reading.

In response to this need, the ABE program where I work began an intensive reading and writing course to work with these students who are “stuck” in intermediate ESL. In this class, instructors have the chance to see what obstacles these students face in their reading skills. A common obstacle we observe occurs during oral reading. When asked to read aloud, students don’t read fluently – they read haltingly, word-by-word, with pauses, miscues, and word substitutions.

This observation led to my research interest of reading fluency, and the following questions: How is reading fluency related to overall reading proficiency? What techniques exist for improving fluency? Are they effective with adult ESL students? As presented in Chapter 2, the literature review, researchers have found that there is a connection between reading fluency and overall reading proficiency. There are a number of effective techniques and commercially available programs for fluency instruction, and researchers show support for use of reading fluency training, in combination with other reading activities, with ESL adults.

In this capstone, I will address the question “*What effect does participation in a supplemental reading program that includes systematic fluency instruction have on the fluency and overall reading proficiency of intermediate level adult ESL students?*” An experimental group of adult intermediate ESL students will participate in a reading program, and I will compare the following results with a control group: reading proficiency as measured by two standardized tests commonly used in ABE programs, attitudes toward reading, and reading practices. Chapter 3 presents the methodology of the study, which includes pre- and post-testing of all participants, pre- and post-study

survey, and the implementation of a reading program with a systematic approach for fluency development, *Reading Skills for Today's Adults* (Southwest ABE – Marshall Region, 2003). Finally, Chapter 4 presents the results - TABE and CASAS reading scores, survey responses about attitudes toward reading and reading practices, and for the experimental group, reading rate measured in WCPM (words correct per minute), a common fluency measure. The study concludes with discussion and potential application of the results, and suggestions for further research. Ultimately, this study could help lead to instructional methods for increasing academic reading ability. Effective methods will aid thousands of students like Fardos gain academic reading skills, a necessary component of GED completion, and one of the “keys” to unlocking doors of employment and economic success here in the U.S.

CHAPTER TWO: LITERATURE REVIEW

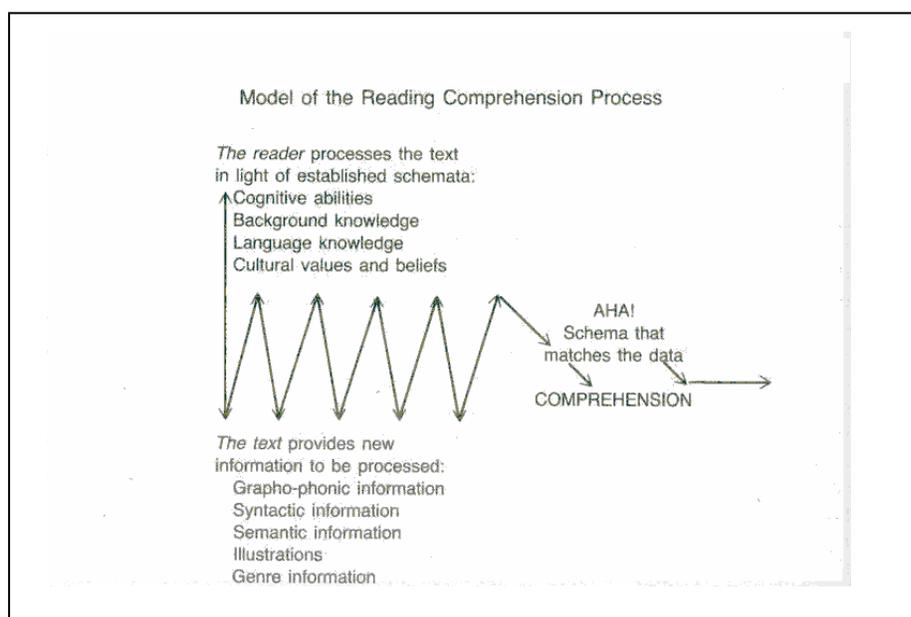
The purpose of this study is to determine the effectiveness of reading instruction that includes fluency training on the fluency and overall reading performance of a group of intermediate adult ESL students. In the adult ESL program where I teach, I have identified low reading fluency as a common characteristic among the student population who 1) are intermediate ESL learners; 2) didn't complete high school; and 3) are in school with the goal of passing the General Education Development (GED) test. Through this study, I provide specific fluency instruction in the context of a reading program to a group of intermediate ESL students, and measure the effects on reading fluency and overall reading performance. The ultimate goal is to determine if reading practice with focused fluency instruction can help adult ESL readers achieve academic reading skills.

This chapter presents an overview of reading and its components, the definition of a fluent reader, and a summary of reading development in adult learners. It includes an explanation of the differences between oral, social language skills (BICS) and academic language skills (CALP) in the context of reading. Finally, research on reading fluency and its link to overall reading proficiency are presented, methods for reading instruction incorporating fluency are discussed, and the need for research in the area of adult reading is shown.

What is Reading?

In a single sentence, reading could be expressed as “interaction between a reader and a text”, or “getting meaning from print”, or “interpreting written information appropriately”. These simple definitions, however, inadequately describe an extremely complex process of conscious and unconscious use of multiple strategies. The act of reading involves recognition of distinctive features in letters, words, and meanings, prediction of meaning, and application of the reader’s knowledge of the world and the topic (Mikulecky, 1990). The complexity and breadth of components involved can be seen in Figure 1. In this figure, the reader (at the top) samples the text (bottom), and compares data with prior knowledge, which activates expectations. This complex, unconscious, interactive process of text and brain activity continues until comprehension has occurred.

Figure 1: The Reading Process (Mikulecky, 1990, p.3)



These complex processes occur simultaneously during reading in a reader's first language, or L1. In second language, or L2, reading there is added complexity. Researchers show that reading in first and second language can be very different. Readers in the initial stages of L1 and L2 reading often have differing amounts of lexical, grammatical, and discourse knowledge. Linguistic and processing differences across L1 and L2, influences of language transfer, and differing reliance on phonological processes affect reading performance (Grabe, 1991; Grabe & Stoller, 2002).

Mikulecky (1990) points out that disfluent reading for many ESL students may not be due to low literacy skills alone. She claims that L2 readers read word-by-word, simultaneously translating to L1. By doing this, these readers may get a feeling of security that they know every word, and therefore know the meaning of the text. But in fact, reading every word may impede comprehension. Smith (2004) states the need for reading at a rate of about 200 words per minute (requiring skipping words and chunking, or taking in groups of words) for effective brain and short-term memory use, and as a result, comprehension. Similarly, Abadzi (1995, 1996) writes about the difficulties of reading in a second language, resulting in slow speed, difficulties in perceiving letters in groups, high error rates, and dependence on sound to understand words, especially when students are faced with new texts.

Reading Models

Various researchers describe reading, especially when discussing L2 reading, in terms of metaphorical models of the reading process – bottom-up, top-down, and interactive (Anderson, 1999; Birch, 2002; Burt, Peyton, & Adams, 2003; Eskey, 1997;

Grabe, 1991; Grabe & Stoller, 2002; Nurss & Hough, 1992; VanDuzer, 1999). Bottom-up models focus on readers extracting information from the text in small units. They start with letters and sounds, and progress to larger units of language, syllables and sentences. This is a phonologically-dependent, data-driven, decoding-heavy model, often called the “phonics” approach to reading. The fundamental idea is that development of fast, unconscious recognition, or automaticity, in the bottom-up processes will contribute to overall reading success.

Top-down models such as the “whole language” approach involve a focus on meaningful and relevant material, valuing prior knowledge and experience, the learner using syntax cues, getting meaning from context, and inference. Comprehension of the “bigger picture” is stressed. For example, Coady (1979) recommends the teacher should put primary emphasis on reading instruction on comprehension strategies, and that too much emphasis on bottom-up strategies such as letter-sound correspondences leads to poor priorities in choosing/applying strategies.

For L2 readers, most researchers support a combination of both top-down and bottom-up processing, called the interactive model or balanced literacy approach (Anderson, 1999; Birch, 2002; Burt, Peyton, & Adams, 2003; Eskey, 1997; Snow & Strucker, 2000; Tan, Moore, Dixon, & Nicholson, 1994; VanDuzer, 1999). They recognize that L2 readers need to use bottom-up processes, but also that these processes often aren’t automatic, so they need to activate top-down processes to try to get meaning. In this model, students benefit most from a variety of reading instruction methods –

phonological awareness and word recognition (bottom-up), as well as syntactical awareness and schema activation (top-down).

Reading Skills and Strategies

In contrast to metaphorical models of reading, other researchers present reading, in both L1 and L2, as a set of component skills and strategies to be developed and taught (Burt, Peyton, & Adams, 2003; Grabe, 1991; Grabe & Stoller, 2002; Kruideneir, 2002; Learning Disabilities Association of Minnesota, 2004; National Reading Panel, 2000; Partnership for Reading, 2001). Many definitions of reading include some version of the following:

- Phonemic Awareness – the ability to hear, identify, and manipulate sounds in spoken language.
- Phonics knowledge – the understanding that there are systematic and predictable relationships between written letters (graphemes) and spoken sounds (phonemes), and the ability to use these relationships to read and write words
- Vocabulary – knowing and understanding the meanings of individual words. Vocabulary knowledge is crucial for understanding text and gaining meaning from what is read.
- Fluency – the ability to read a text (phrases, sentences, or passages) accurately, quickly, smoothly, and with good expression. Specific skills include decoding accuracy, automaticity, and the appropriate use of stress, pitch, and phrasing.

- Comprehension – the understanding of what is read or the active process of constructing meaning from text. It involves all the above components working together and is the ultimate goal of reading.

(Learning Disability Association of Minnesota, 2004; Partnership for Reading, 2001)

Also, researchers describe reading in terms of strategies, or reading skills that are consciously applied. Strategies necessary for comprehension include the following:

- Previewing and predicting contents of the text, then checking predictions
- Schema activation, or engaging cultural or background knowledge to gain meaning
- Making inferences
- Paying attention to text structure and connecting one part of the text to another
- Summarizing information
- Guessing meanings of words from context
- Recognizing grammatical relationships between words using word order and morphological cues to understand meaning
- Understanding discourse structure
- Rereading
- Critiquing the author or text
- Reflecting on what has been learned from the text

(Burt, Peyton, & Adams, 2003; Grabe, 1991; Grabe & Stoller, 2002; Mikulecky, 1990).

What Makes a Fluent Reader?

Smith (2004) talks about fluent reading as the experienced, familiar approaching of a text with ease that comes from exposure to many kinds of texts. He states that fluent readers employ these reading components – purpose, selectivity (sampling the text and only taking in what’s needed to gain meaning), expectation, and comprehension. They also have knowledge of conventions of the text, such as vocabulary, grammar, and narrative devices. Less fluent readers are more dependent on individual words in the text when they read because they bring less prior content knowledge, and they employ fewer effective strategies. For example,

VanDuzer (1999) defines fluent readers as those who do the following:

- read with purpose (for information or pleasure)
- understand the purpose of different texts (editorials, recipes, ads)
- read quickly, maintaining a flow, making connection and inferences to understand the text
- use a variety of strategies to read efficiently (previewing headlines, predicting, etc.)
- interact with the text, using schema and the printed information
- evaluate the text critically, determining if they agree or disagree
- expect to understand the text and get meaning from it
- usually read silently

Additional characteristics researchers have identified for fluent readers are: read all or most of the words on the page, rely heavily on context clues for comprehension but minimally for word recognition (Snow & Strucker, 2000), make use of orthographic,

syntactic, and semantic redundancies to reduce uncertainty and switch back and forth between the text and what you already know (Mikulecky, 1990) and reread, and identify difficulties (Grabe & Stoller, 2002).

Other definitions of fluent reading focus on oral reading, a measurable indicator of fluency. Most research describes fluent oral reading as reading texts with the combination of speed, accuracy, automatic word recognition, and prosody, or reading with expression, which includes pitch, stress, and rhythmic patterns. Without these, reading is described as disfluent - slow, word-by-word, halting, and with poor phrasing and inadequate intonation. In order to read fluently, readers must reach a point of automaticity - instant, accurate recognition of words – and acquire native-like intonation, stress, and tempo (Kuhn & Stahl, 2003). As a reader starts to group words together, there is a transition from word-by-word reading to reading in meaningful phrases. As automaticity develops, the reader can read more quickly and have more attention available for meaning (Allington, 2004; LaBerge & Samuels, 1974).

Reading Development

Development of reading in children and adults has been viewed by researchers as a series of stages (Chall 1983; Harris & Sipay 1990; Norman & Malicky, 1987).

Although varying in number of stages, all models include some mention of the following:

a) reading readiness, also called emergent literacy, such as preschool exposure to concepts of reading and being read to by parents; b) initial sound-symbol correspondence

acquisition; c) decoding development; d) practice leading to “automatic” decoding and word recognition; e) development of reading with syntactic awareness and natural or conversational rhythms with comprehension; f) shift to reading for instruction and “new” material; and g) critical reading. Chall states that illiterate or “functionally literate” adults need greatest practice in the stages which include c) and d) above – practice in decoding and gaining fluency (1983).

An adult ESL students’ first language and literacy background affects literacy development as well. Burt, Peyton, & Adams (2003) classifies L1 literacy backgrounds in the following way: preliterate, nonliterate, semiliterate, nonalphabet literate, non-Roman alphabet literate, and roman alphabet literate.

The study proposed in this paper examines a group of ESL adults of which the majority fall into Chall’s classification of *functionally literate* – those who have limited or inadequate schooling in L1, can read familiar material such as application forms and labels, but lack the ability to gain new technical or scientific knowledge (1983). According to Burt, Peyton, & Adams, they would be classified as *semiliterate* – those who had limited access to literacy instruction in L1 (2003). These classifications aptly describe the reading abilities of the participants of this study. All are beyond the prereading level, having established sound/symbol correspondence, and read some in their first languages. They are at the stage of needing automatic decoding and fluency training, the next step in development toward academic reading skills, according to Chall (1983).

BICS and CALP

An important language distinction relevant to this study and the acquisition of academic reading skills is the difference between Basic Interpersonal Communicative Skills (BICS), and Cognitive Academic Language Proficiency (CALP) as originally defined by researcher Jim Cummins (1979). BICS is described as context-embedded, face-to-face conversational proficiency in which meaning can be negotiated and enhanced with paralinguistic and situational cues. It can be acquired in approximately two years, provided the learner is immersed in and can use the second language. CALP, in contrast, is context-reduced, cognitively demanding, and relies primarily on linguistic cues for meaning. The time of acquisition is much longer, anywhere from seven to fifteen years, depending on the learners' educational and literacy background, and exposure to academic language. For example, Khadro, a student with limited formal schooling in the ABE program where I work, is an example of a learner with highly developed BICS, but low CALP. Since arriving in the U.S. six years ago, she has acquired conversational English quickly through on-the-job interactions and making friends. She can communicate orally with ease, but struggles to read, comprehend, and write basic texts.

Since the initial definition, Cummins has elaborated these concepts into cognitive involvement (cognitively demanding/undemanding and context embedded/reduced) in communication activities (1994), but the original acronyms have become symbolic and meaningful of the difference between the two types of language proficiencies. The greater goal for this study's research is, ultimately, acquisition of CALP for adult ESL

learners. In her book *Teaching Adult ESL*, Parrish (2004) describes a mismatch between adult ESL learners' basic communication skills and advanced literacy skills. Often adult ESL learners with low or interrupted education, and who have lived in the U.S. a long time have mastered BICS but lack higher level literacy skills.

So how can adults acquire CALP? Based on a large body of research with children and adolescents, researchers claim that as they get older, the acquisition of CALP and the ability to catch up academically with others of the same age become more difficult and take more time (Collier, 1987; Cummins, 1994). When discussing adults, Wiley (1996) claims that it is likely that many issues related to child literacy acquisition are relevant to adults, but that more research is needed. Recommendations from that research include: integrate language teaching with the teaching of academic content (Cummins, 1994), provide instruction in how to comprehend content materials and to acquire test taking skills (Burt, Peyton, & Adams, 2003; Nurss & Hough, 1992), customize instruction for the reading component areas in which the learner is lacking (Burt, Peyton, & Adams, 2003; Snow & Strucker, 2000).

Fluency and Reading Performance

An important question arises when looking at the population in question for this study - disfluent readers with low academic reading skills. *Will improving fluency lead to better comprehension?* Many researchers claim there is a positive correlation between reading rate and/or fluency, and reading comprehension. One of the first connections

comes from a paper by Laberge & Samuels (1974), in which they claim that when students read fluently, they use less of their attention for decoding, so they have more attention for comprehension. When they have efficient low-level word recognition, they have more capacity for higher level comprehension processing, and the result will be better understanding. Also, through fluent reading, students will see and get meaning carried by punctuation, rhythm, emphasis, pauses, and intonation. Reading fluency is also referred to in the literature as a “prerequisite” skill in reading – that it is required for competent comprehension of a text (Allington, 1983; Hook & Jones, 2002; Lipson & Lang, 1991). Conversely, slow, disfluent reading is linked with poor comprehension (Rasinski, 2000). As a result, students read less, which leads to slower progress in reading.

Research with Children

The majority of current reading research is with native English speaking children, and many researchers show the link between reading fluency and overall reading performance with these children. For example, in his book *The Fluent Reader*, Rasinski (2003) reports that children in his reading clinic, through building oral reading fluency, attain significant gains in comprehension. There are many studies showing this connection, including the following three large-scale, nation-wide studies. The National Reading Panel (2000) examined 77 articles on reading fluency in children, and found that reading fluency instruction consistently improved word recognition, fluency, and comprehension for a range of grade levels. Similarly, the National Research Council (Snow, Burns, & Griffin, 1998) conducted a large-scale meta-analysis that examined

early childhood (pre-K-3) reading development. It claims that ability to obtain meaning from print is dependent on the development of word recognition accuracy and reading fluency, and it recommends regular classroom assessment . A third nation-wide reading research study was conducted by the National Assessment of Educational Progress (Pinnell, et al., 1995), which assessed the reading ability of 1,136 fourth-grade students. Findings on fluency in this large study were published separately by White (1995). She states that there is a close relationship between reading fluency and reading ability - that higher levels of fluency were associated with higher average reading proficiency.

In their analysis, Fuchs, Fuchs, Hosp, & Jenkins (2001), examined oral reading fluency as an indicator of overall reading performance in American schoolchildren. They claim that 1) word recognition skill relates strongly to text comprehension; 2) variations in text fluency (rather than word list fluency) are significant indicators of reading comprehension variance; 3) fluency may reflect readers' capacity to make inferences; and 4) that reading fluency is linked with comprehension. A compelling study by L.S. Fuchs, Fuchs, & Maxwell (1988) cited in their analysis involved 70 middle and junior high school students. The researchers examined the correlation to comprehension of four reading measures: oral recall/retell, cloze, question answering, and oral reading fluency. The results showed the strongest correlation of comprehension with oral reading fluency.

In a meta-analysis of reading fluency research, Kuhn & Stahl (2002) examined 71 studies of fluency intervention and found that fluency instruction in any form seemed to improve children's fluency and comprehension, especially readers in first and second grades, and older children who read disfluently. There were only two studies that were

exceptions (Carver & Hoffman, 1981; Dahl, 1979). In these two, the researchers found effects of fluency instruction on microcomprehension (through cloze exercises), but not for more macrocomprehension, or general comprehension, measures such as standardized tests. They propose that macrocomprehension processes might depend more on prior knowledge and more global comprehension strategies than simply decoding words rapidly and reading aloud fluently.

Research with Adults

In contrast to the large body of research on reading fluency in L1 children, there is very little research with adults. A recent meta-analysis on adult reading, *Research-Based Principles for Adult Basic Education Reading Instruction* (Kruidenier, 2002), examines research related to adult literacy reading instruction, and presents findings as principles and practices for practitioners. It claims that fluency can be taught to adults in ABE programs, that fluency leads to increases in reading achievement, and that repeated readings of a text can be used with adults to develop reading fluency.

Snow & Strucker (2000) wrote a follow-up article to the 1998 National Research Council report *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998) and published “lessons” relevant to ABE and ESOL learners. They claim that poor decoding and lack of fluency will impede acquisition of reading vocabulary and knowledge needed for GED study.

There exists other reading fluency research with adults in addition to the studies cited in the Kruidenier report. Another researcher conducted a study of six adult participants, and found that repeated reading of passages through the Reading to Read

program led to significant improvement of oral reading fluency (Bell, 1996). Another study with adults was conducted by Greenberg, Frederick, & Hughes (2002). In this study, eleven adult students received training in phonics, decoding, and fluency using a curriculum designed for elementary and high school students; after 80 hours of instruction, 60 percent of the learners were able to move to the next level of curriculum. Similarly, Massengill (2004) reported significant gains in reading level and word-recognition behavior after 36 hours of guided reading instruction, which included repeated reading, phonics, word part study, decoding, and sight words.

In summary, the large body of research on reading fluency and comprehension with children, and the smaller body of research with adults seems to show two main findings: 1) there is a significant connection between the two; and 2) fluency instruction can aid in general reading development and improvement of comprehension. This study will attempt to confirm this connection with low academic skills adult ESL learners, a group not included in the existing body of research, and will test the efficacy of reading instruction with a fluency component.

Reading Instruction with Fluency Components

Several researchers support a balanced reading approach for L1 and L2 learners that includes all reading areas, including fluency instruction. Kruidenier (2002) suggests that teaching comprehension along with instruction in other components of reading is an effective way to improve reading comprehension for adults. Hoffman & Isaacs (1991)

recommend fluency instruction as part of a more comprehensive, “all-skills” reading program. VanWagenen, Williams, & McLaughlin conducted a study of ESL secondary students that shows that an assisted reading program, including reading while listening, oral reading, and silent reading, is effective in improving reading rate and increasing comprehension (1994). In another study with adult ESL learners, Tan, Moore, Dixon, & Nicholson (1994) recommend a balanced approach of developing decoding skills and comprehension strategies for optimal improvement in reading comprehension. Similarly, other researchers state the need for instruction that incorporates lower-level skills such as decoding and phonics together with higher-level skills such as predicting, finding main idea, and making inferences (Anderson, 1999; Birch, 2002; Eskey, 1997). Finally, Strucker and Snow (2000) recommend assessing all components of reading in ABE/ESL students to establish a fuller picture of all reading skills, both bottom-up and top-down. They recommend a complete test battery which assesses phonological awareness, word analysis, word recognition, spelling, oral reading, comprehension, and oral vocabulary. From the results, it is possible to determine and customize reading instruction that best meets the students’ needs.

Reading Activities and Instructional Strategies for L2 Adults

VanDuzer (1999) conducted an analysis of L2 adult reading research, and presents the following instruction recommendations that incorporate top-down as well as bottom-up reading skills:

- Use of interesting, relevant, authentic texts

- Phonemic awareness and phonics training for preliterate and non-Roman alphabet literate learners
- Vocabulary development through pre-teaching, guessing meaning from context, and language awareness activities with synonyms, antonyms, and affixes
- Practice using strategies like skimming, scanning, predicting, and using illustrations and context to guess meaning
- Prereading activities to activate background knowledge
- Evaluation of texts for implicit values and assumptions
- Encouragement of extensive out-of-class reading.

Similarly, Burt, Peyton, & Adams (2003) recommend the following instructional strategies for working with L2 adult readers: more instructional time spent on reading, oral reading, word decoding, explicit and preliminary vocabulary teaching, instruction in morphological and grammatical structures, comprehension strategies, and use of reading materials slightly above the readers' L2 proficiency. These practices are reinforced and expanded in recent work on ESL adult readers by Burt, Peyton, & Van Duzer (2005).

They compare ESL readers to native-speaking ABE readers and make specific recommendations in the component areas of vocabulary, alphabets and word analysis, fluency, and comprehension. Some vocabulary practices they support are pre-teaching vocabulary, selecting texts slightly above learners' levels to limit number of new words, and having learners write sentences and texts in which they use new words. In addition, they recommend having students hear native-speaker-like models of reading, providing

instruction in comprehension strategies, assessing comprehension through short answer questions, cloze exercises, and summary writing, but only after pre-teaching vocabulary, previewing cultural contexts, and discussion of the text.

Fluency Instruction

In the extensive literature on reading with native-English-speaking children, there are a variety of approaches presented for instruction. One set of researchers claims there are three things teachers can do to help students acquire fluency: 1) motivate students to read independently so they become automatic in decoding; 2) help students acquire decoding strategies through instruction; and 3) provide students with enough reading practice so they become automatic (Samuels, Schermer, & Reinking, 1992). Another approach claims that a lot of reading practice with books that are at the right level of challenge will develop fluency (Allington, 2004). Other researchers recommend more focused instructional techniques to develop fluency, and a common factor among them is repetitive oral reading.

The most referenced and widely used fluency instructional technique, and what appears to be the basis of current fluency instruction, is Repeated Readings (Samuels, 1979). It is based on the information processing model of Laberge & Samuels (1974), which purports that as students develop automaticity, they can read fluently. The technique consists of rereading a short passage (50-200 words) several times until a desired level of fluency is achieved. Then the procedure is repeated with new passages. Two components of the reading are measured – word recognition accuracy and reading speed, and results are graphed, showing students and teachers motivational visual

progress. Samuels claims that rereading texts builds both fluency and enhances comprehension, because with each rereading, the student gradually overcomes the decoding barrier, and applies more attention to comprehension. He compares reading development to skills development of musicianship and sports ability. With all three, moves must be made rapidly and automatically, and the ability is acquired through repeated practice of those moves (1979).

A variety of methods and techniques involving repetitive reading have been developed with native-English-speaking children and are cited in the literature. An early variation used by Chomsky (1978) combined repeated reading with listening to taped stories. Others include unassisted silent repeated reading, assisted reading aloud and along with a fluent reader, and prosodic reading – reading with a model reading with expression (Meyer & Felton, 1999). Carreker (1999) proposes the following activities: daily practice, modeling by the teacher, teacher reading with pauses, listening to taped reading, flash cards, and use of a marker or pencil across and down the page to aid the flow of reading. Other techniques designed for English speaking children include paired reading, echo reading, choral reading, buddy reading, reading with talking books, Readers Theatre, and Rate Buildup Reading (Allington, 2004; Anderson, 1999; Archer, Gleason, & Vachon, 2003; Dowhower, 1989; National Reading Panel, 2000; Rasinski, 2000; Worthy & Broaddus, 2001).

Fluency instruction techniques based on repetitive reading have led to the development of commercial fluency improvement programs such as *Read Naturally*, *RAVE-O*, and *Great Leaps*, which all incorporate some variation of repeated reading.

The differences among them are in the amount of practice and instructional time, decoding single words vs. text passages, and number of repetitions. *Read Naturally* (Hasbrouck, Innot, & Rogers, 1999), designed for native-English-speaking children, incorporates teacher modeling through recorded texts, repeated reading, and progress monitoring through graphs. It also includes pre-reading, comprehension questions, and oral retell. *RAVE-O* (retrieval, accuracy, vocabulary, elaboration-orthography) (Wolf, Miller, & Donnelly, 2000) is a system also designed for English-speaking children that includes systematic decoding instruction, “chunking”, word parts pattern recognition, single word speed drills, and vocabulary development exercises. Trained teachers provide instruction in phonics, word recognition, and text via computer programs, games, manipulatives, and props. In *Great Leaps* (Campbell, 1995), students of all ages (K-Adult) practice decodable word reading, phrase reading, and text reading in one-minute segments. Teachers or tutors model fluent reading and provide feedback. Progress in speed and accuracy is graphed.

Various researchers recommend fluency instruction with adult learners. Singh, Singh, & Blampied (1984) support the use of repeated reading with adult learners. They recommend a combination of Samuels’ technique of Repeated Readings (1979) and Chomsky’s listening and reading technique (1978), through activities such as the Language Experience Approach (LEA). Rigg & Kazemek (1985) and Thistlewaite (1986) also recommend LEA, which includes reading and rereading student-generated text as a method to provide meaningful texts for adult literacy.

In addition to recommending fluency instruction techniques, researchers who study reading with adults and children present the need for reading material that is of interest to the novice adult reader (Mudd, 1987; Bell, 1996). Similarly, researchers with adults state the importance of finding or creating material that is meaningful and interesting to adult students (Anderson, 1999; Burt, Peyton, & Adams, 2003; Rigg & Kazemek, 1985; Thistlewaite, 1986, VanDuzer, 1999). Kruidenier (2002) states that use of adult-oriented content material is an effective way to help improve comprehension. Adults bring their own knowledge, experience, and language to the reading classroom, and materials need to reflect and respect that.

In summary, proven effective fluency instruction for children, researchers' recommendations for fluency instruction for adult learners, and the fluency instruction methods and programs lead to the instructional choice for this study. It uses a recently developed fluency program for adults, *Reading Skills for Today's Adults* (Southwest ABE – Marshall Region, 2003), which was developed to provide a combination of repeated readings, listen-while-reading, motivational recording of progress, reading strategies, and comprehension activities. In addition, the text topics are of interest to ABE students, such as community resources, health, civics, parenting, and employment.

Need for research

There appears to be a strong need for more research on the reading development, materials, programs, and instructional methods for adults (Abadzi, 1995, 1996; Bowren,

1987; Kruideneir, 2003; Malicky & Norman, 1982; Snow & Strucker, 2000; Wiley, 1996). Greenberg, Frederick, & Hughes (2002) ask some questions this study will look specifically at, such as: *Is the grade equivalency concept inappropriate to use when measuring reading in adults who have difficulties learning to read? How many hours of instruction are needed to show reading growth with adults who possess low literacy skills?* Singh, Singh, & Blampied (1984) and Bell (1996) specifically recommend research similar to this study on adult reading fluency in response to the scarcity and slow development of instructional techniques to teach reading skills to adults. They state the need for research and recommend a program involving repeated reading or Language Experience Approach as viable methods to pursue.

In the field of reading in adult ESL learners, Burt, Peyton, & Adams (2003) note the paucity of research on adult nonnative English speakers learning to read and present the following needed areas: brain activity and L1/L2 reading, role of L1 oral proficiency and literacy, threshold levels of L1 literacy for transfer to L2, the effects of extensive reading in English, types, length, and intensity of instruction, and the applicability of programs and strategies developed for children or native English speakers. Other researchers also call for additional research on adult ESL reading. (Burt, Peyton, & VanDuzer, 2005; Massengill, 2004; National Institute of Child Health & Human Development, n.d).

Need for research on adult ESL reading can be viewed outside the realm of educational researchers as well. Teachers working with these students state the need for effective methods and materials to use with low education ESL readers. There is an

abundance of reading development materials available for children and native English speaking adults learning to read, but few designed specifically for limited education ESL adult readers. On a societal level, the growing trend of immigrants and refugees from countries where a large portion of the population does not have access to literacy or where the languages are spoken and not written has increased the need for effective methods of English language and literacy instruction (Huntley, 1992). The connection between self-sufficiency, continuous employment, and increased earnings and literacy in English for the immigrant community (Chiswick & Miller, 2002; Greenberg, Macías, Rhodes, & Chan, 2001) also warrants improved methods and materials for reading development.

Finally, on an individual level, students like Fardos in the ABE program where I work express the need in their lives for better reading, and methods/materials to help them achieve academic reading proficiency. Their goals of GED and post-secondary education depend on their acquisition of these skills, and pose a need for research to help them achieve success.

Conclusion

This chapter reviewed the literature on reading theory, development, fluency, and instructional strategies and activities for adult ESL learners, and included an explanation of the differences between BICS and CALP. Finally, it stated the need for research in all components of adult reading, including fluency. As a result, the literature review

provides support for a study that will contribute to the need in research on reading fluency and adult ESL students (as well as the need in the students' lives), and it presents rationale for use of a reading program that includes focused fluency training for the purpose of this study.

The study will use materials that support the L2 adult reading research presented in this chapter, a program called *Reading Skills for Today's Adults*, which was developed to provide instruction in a combination of reading skills. It includes a variety of research-recommended reading activities, such as: schema-activating pre-reading activity, vocabulary presentation and guessing from context, comprehension questions, and a fluency component that uses the methods of repeated readings and listening-while-reading. In addition, it was specifically written for an adult audience, on topics meaningful and of interest to ABE learners, both native and non-native speakers of English, such as community resources, health, civics, parenting, and employment. In chapter three, this reading program will be described in detail and the methodology of the study will be presented.

CHAPTER THREE: METHODOLOGY

This chapter presents the method of research to answer the research question “*What effect does participation in a supplemental reading program that includes systematic fluency instruction have on the fluency and overall reading proficiency of intermediate level adult ESL students?*” It will describe the subjects, assessment, instructional method, and project timeline.

Subjects

The subjects of this study are 18 adult ESL students in an Adult Basic Education (ABE) program. Six participants are full time students, attending 27 hours of class per week, and 12 are half-time students, attending 12 hours of class per week. Classes are comprised of 15-30 students from a large variety of language, academic experience, and socioeconomic backgrounds. Instruction is designed and delivered based on a tri-faceted curriculum of English language, lifeskills, and civics, and includes weekly computer-assisted learning. Students learn about government, history, community involvement, and culture through civics; they learn and practice day-to-day interactions in lifeskills areas such as health, transportation, employment, housing, and shopping. Finally, English language training includes reading, writing, listening, speaking, grammar, and spelling.

This study used a *true experimental design* (Brown & Rodgers, 2002), in which two groups of participants are pre-tested, one group receives experimental treatment, while the other receives control treatment, and finally, both groups are post-tested. In this study, the two groups are: 1) an experimental group who attended reading sessions with focused fluency instruction outside of regular ESL classes, and 2) a control group which solely attended ESL classes. Participant data is shown in Table 1.

Participants ranged in age from 22 to 51, and their time in the U.S. ranged from three months to seven years. Seven of the eighteen participants study full-time at the school (24 - 27 hours per week), and eleven study part-time (12 - 15 hours per week). Their native languages included Amharic, French, Oromo, Russian, Somali, and Spanish. Sixteen of the eighteen participants list the GED and/or post-secondary education as a goal in the U.S. Participants could be divided into two groups based on educational background: 1) eight participants completed ten or more years of education, with six of them having completed high school; and 2) eleven participants finished between three and nine years of education. The latter group consists of mainly East African students who have developed strong oral, social language skills (BICS), but lack academic language skills (CALP).

Table 1: Participant Data

Name	<i>Age</i>	Country	Yrs U.S.	Yrs Sch.	Hrs stud	Pre- CASAS	Pre- TABE
EXPERIMENTAL							
Student 1	33	Mexico	4	9	3	231	3.7
Student 2	22	Mexico	2.5	13	6	223	5.2
Student 3	33	Mexico	3	9	6	228	4.1
Student 4	24	Mexico	5	10	3	227	5.2
Student 5	29	Somalia	7	7	3	213	1.8
Student 6	23	Mexico	0.5	19	3	221	2
Student 7	27	Russia	0.25	10	3	220	3.3
Student 8	23	Mexico	0.5	17	6	225	2
Student 9	26	Somalia	6	6	6	216	2.4
CONTROL							
Student 10	24	Ethiopia	1.5	8	6	209	2.1
Student 11	26	Mexico	4	6	3	209	1.8
Student 12	22	Somalia	3	3	3	215	2.1
Student 13	51	Mexico	0.5	17	3	224	3.2
Student 14	22	Somalia	4.5	6	6	215	1.9
Student 15	23	Togo	0.5	14	3	226	2.5
Student 16	29	Somalia	6	6	6	212	3.5
Student 17	37	Mexico	3	12	3	220	2.4
Student 18	24	Ethiopia	1.5	8	3	216	2.8

Data Collection

The data collected in this study included two standardized reading tests, pre- and post- study surveys on participants' attitudes toward reading and reading practices, and the reading rate of the experimental group. The standardized assessments used in this study were the Comprehensive Adult Student Assessment System (CASAS) Lifeskills Reading and the Test of Adult Basic Education (TABE) reading tests. Both tests are designed to assess reading of adults in Adult Basic Education (ABE) programs, but they differ in the type of reading tested. The CASAS Lifeskills reading test is a competency-based, multiple-choice exam in which students answer questions based on real-life reading tasks such as interpreting a paystub, lease, label, or map. Scores can range from 170 to 260 and are correlated to beginning to advanced reading and ESL ability (CASAS, n.d., Research Reports).

The TABE is a norm-referenced multiple-choice reading test used in ABE programs. It assesses reading skills in both lifeskills and academic contexts, with questions about lifeskills documents as well as academic prose (McGraw-Hill, 1987). Scores are given in grade equivalency level, and can range from 0 to 12.9. The version used in this study is the TABE 9&10, which consists of the pretest, TABE 9, and corresponding posttest, TABE 10 for all reading levels. I chose the TABE for this study because local GED preparation programs use TABE scores as entrance requirements, and because the test assesses academic reading skills, or Cognitive Academic Language Proficiency (CALP).

Surveys were designed to determine participants' attitudes toward reading and reading practices before and after the study. In addition to standardized test scores, I wanted to hear "first hand" from participants how they felt about reading both in L1 and English, and how/if they feel like their reading is improving both in ESL classes and in the experimental instruction. The surveys can be found in Appendix A.

Reading rate was measured by the researcher or a trained volunteer at the beginning and end of each experimental group reading session. Participants read aloud for one minute, while the researcher/volunteer marked errors (omissions, insertions, and substitutions were counted as errors) and documented words correct per minute (WCPM). Participants also documented WCPM on individual charts.

Procedure

A. Pre-Assessment

At the beginning of the study, I pre-tested all participants in both the control and experimental groups using the TABE 9 reading exam. I recorded CASAS Lifeskills reading scores at the beginning of the study from site records (all students at this Adult Basic Education site are required to pre- and post-test using CASAS for ESL classes). Participants also completed the pre-study survey on their attitudes toward reading and reading practices in L1 and English.

B. Fluency Instruction

The experimental group received focused reading instruction incorporating fluency for approximately 10 hours over the course of 6 weeks in addition to regular ESL coursework. The number of hours chosen for the study was based on two factors: previous empirical studies with similar number of hours (Frantantoni, 1999 – 10 hours/8 weeks; Homan, Klesius, & Hite, 1993 – 7 hours/7 weeks; Stoddard, Valcante, Sindelar, O’Shea, & Algozzine – 6 hours/3 weeks; Valleley & Shriver, 2003 – 10 hours/10weeks), and the high attrition, short-term study of many ABE learners due to family, job, and financial demands. Experimental group participants met in a classroom setting before or after regular ESL classes three to four days per week, for approximately 50 minutes each session.

As mentioned in the literature review, materials for fluency instruction were *Reading Skills for Today’s Adults*, a collection of level-graded texts written for reading practice with focused fluency instruction (Southwest ABE - Marshall Region, 2003).

Each session involved the following components of reading:

- pre-reading questions
- vocabulary words
- silent reading
- timed oral reading
- listening-while-reading
- post-reading
- questions

- a writing task

Participants worked independently and had one-on-one time with an instructor/volunteer for initial timing, questions, pronunciation concerns, and final timing. An example text is shown in Appendix B. The process of instruction during each session is as follows:

1. Make predictions about the text by answering the preview questions and discussing new vocabulary presented.
2. Read the text silently once.
3. Initial timing: read the text aloud for one minute and instructor evaluates and calculates WCPM.
4. Read the text three times while listening to audio recording or instructor reading aloud.
5. Practice reading the text aloud.
6. Answer the comprehension questions and do the follow-up writing.
7. Final timing: read the text aloud for one minute and instructor evaluates and calculates WCPM.
8. Graph initial and final WCPM on chart.

The procedure used in this study with *Reading Skills for Today's Adults* varied from the original design in that the instruction for this study was conducted as a class instead of individually. In the original design, students work alone with a level-appropriate text they choose and operate a cassette with headphones. They have control over the cassette to listen, repeat, and read aloud with their text. For this study, I chose to work as a group because of the relative homogeneity of the participants' intermediate-

level ESL reading ability, lack of audio equipment for individuals, and the time constraint of a 50-minute session.

C. Post-Assessment

After six weeks of ESL classes for both the experimental and control groups and 7-12 hours of additional reading instruction for the experimental group, I post-tested all participants using the TABE 10 Reading exam and conducted the post-study survey in which participants again reported their feelings about reading and their reading practices. Additionally, the experimental group gave their perceptions of the supplemental reading practice and the effectiveness of focused fluency instruction. Finally, I recorded CASAS post-test scores after participants took the exam as part of ESL classes.

Conclusion

In summary, the methodology of this study involved assessing the overall reading proficiency of all participants via pre-and post-testing with the TABE Reading and CASAS assessments, and measuring progress in reading rate (in WCPM) during the intervention for the experimental group. Attitudes toward reading, type and frequency of reading, and perceptions of reading progress were described in a pre- and post-study survey. Chapter 4 will show the results of these assessments and summarize the data.

CHAPTER FOUR: RESULTS

The data for this study is presented as follows: pretest and posttest scores for the TABE and CASAS tests, reading speed measured in words correct per minute (WCPM) for each of the practice sessions, and pre- and post-study survey responses.

CASAS and TABE tests

CASAS scores of the participants in this study ranged from 204 to 243, with 90% of the scores between 208-230, which correspond to a range of low intermediate ESL to advanced ESL (CASAS, n.d., Research Reports). TABE scores ranged from 1.6 to 5.2 grade equivalency level (GE). Pretest and posttest scores for each participant are presented in Table 2. One set of TABE scores was not counted in the analysis, that of Student 16, because of misunderstood test instructions and high anxiety during the posttest leading to an unreliable score, from 3.5 on the pretest to 0.0 on the posttest. As shown in Table 2, a higher number of participants scored higher on both tests pre- to post in the experimental group when compared to the control group.

In addition to examining the test scores of experimental versus control group, I also looked at scores correlated to various factors: educational background, years in the U.S., and full-time/part-time student status. There didn't appear to be a correlation between participants' years in the U.S. or full-time/part-time student status and test scores, but educational background seemed to be a significant factor.

Table 2: TABE and CASAS Scores

Participant	<u>TABE</u>		<u>CASAS</u>	
	Pre-Test	Post-Test	Pre-Test	Post-Test
EXPERIMENTAL				
Student 1	3.7	4.5	231	230
Student 2	5.2	4.1	223	224
Student 3	4.1	4.6	228	229
Student 4	5.2	5.2	227	243
Student 5	1.8	1.8	213	221
Student 6	2	2.7	221	221
Student 7	3.3	2.5	220	224
Student 8	2.0	3.8	225	221
Student 9	2.4	3.1	216	214
CONTROL				
Student 10	2.1	1.9	209	208
Student 11	1.8	2.5	209	223
Student 12	2.1	1.9	215	204
Student 13	3.2	3.2	224	226
Student 14	1.9	1.6	215	212
Student 15	2.5	2.4	226	227
Student 16	3.5	0	212	224
Student 17	2.4	2.4	220	220
Student 18	2.8	2.8	216	216

Means (M) , standard deviations (SD), and gains of the experimental vs. control group scores, as well as a breakdown of the two educational background groups – 3 to 9 years of education and 10+ years of education – are presented in Tables 3 and 4. The results show that on average, there was very little change in CASAS scores. The

experimental group on average scored slightly higher than the control group, 1% vs. 0.1% gain. In the educational background breakdown, again there was very little change in scores, all less than 2%. TABE scores, on the other hand, showed more significant gains. The experimental group scored, on average, 9% higher on the TABE pre- to post-test, while the control group showed close to no change, indicating a possible correlation between supplemental reading practice and overall reading proficiency, especially with academic reading skills as measured by TABE scores. Within the experimental group, the TABE scores of participants with lower education increased on average 17%, while the group with higher education gained 3%, indicating that participants with lower education may benefit most from supplemental reading practice such as this.

Table 3: CASAS Scores, Means, and Standard Deviations

	Pretest		Posttest		Gain	%Change
	M	SD	M	SD		
Experimental (n=9)	222.7	5.81	225.2	8.18	2.56	1.2%
Control (n=9)	216.2	6.08	217.8	8.26	1.56	.12%
Experimental						
3-9 yrs (n=4)	222.0	8.83	223.5	7.51	1.5	.68%
10+ yrs (n=5)	223.2	2.86	226.6	9.29	3.4	1.52%
Control						
3-9 yrs	212.7	3.14	214.5	8.04	1.8	-.09%

(n=6)						
10+ yrs (n=3)	223.3	3.05	224.3	3.79	1.0	.45%

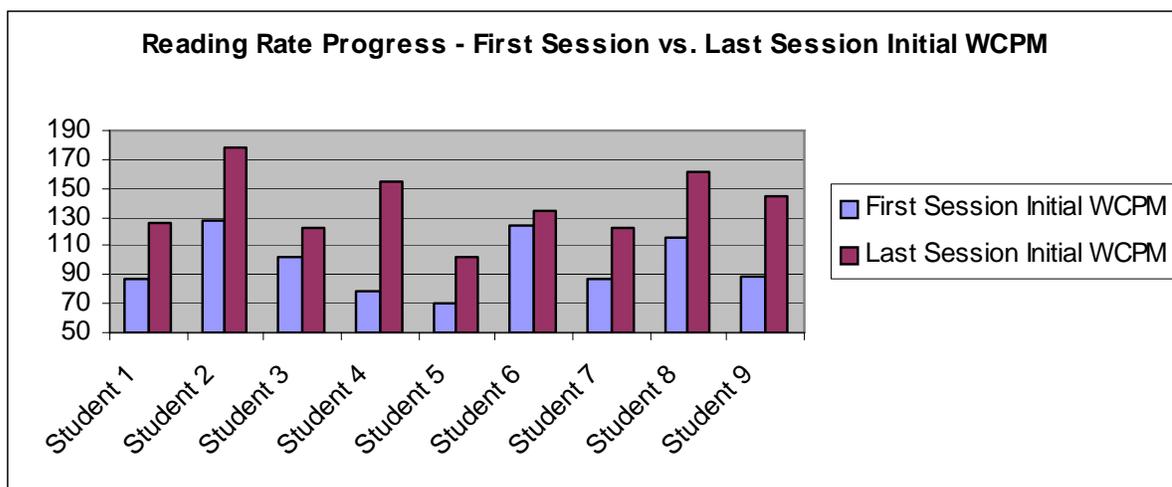
Table 4: TABE Scores, Means, and Standard Deviations

	Pretest		Posttest		Gain	%Change
	M	SD	M	SD		
Experimental (n=9)	3.30	1.34	3.59	1.13	.29	8.75%
Control (n=9)	2.35	.475	2.34	.524	-.01	-.43%
Experimental						
3-9 yrs (n=4)	3.00	1.08	3.50	1.32	.5	16.7%
10+ yrs (n=5)	3.54	1.61	3.66	1.10	.12	3.39%
Control						
3-9 yrs (n=6)	2.14	.391	2.14	.493	0	0%
10+ yrs (n=3)	2.70	.436	2.67	1.01	-.03	-1.23%

Reading Speed

During each reading session, initial and final oral reading speeds were measured by the researcher or volunteer timing/evaluating while the participant read aloud for one minute. In 91% of the timings, reading speed increased from initial to final, and the average increase during a session was 14.1 WCPM. All participants showed an increase in reading speed over the course of 7-12 reading sessions. This is shown in Figure 2, a graph of the individual gains in WCPM in initial timing from the first session and the last session.

Figure 2



The means, standard deviations, and gains for initial and final reading speeds for two groups within the experimental group – those with 3-9 years of education, and those with 10+ years of education - are shown in Tables 5 and 6. All participants showed a large increase in reading speed. Initial reading speeds, pre- to post-study increased by close to 40%, with the higher education participants showing a slightly higher gain. Final reading speeds also increased significantly, by 20-30%. Again, the higher education participants showed a larger gain.

Table 5: Initial Reading Speeds

	Pre-study		Post-study		Gain	%Change
	M	SD	M	SD		
Total	97.8	20.7	139.0	23.5	41.2	42.1%
3-9 yrs (n=4)	86.8	13.1	124.0	17.2	37.2	42.9%
10+ yrs (n=5)	106.6	22.7	150.0	22.2	43.4	40.7%

Table 6: Final Reading Speeds

	Pre-study		Post-study		Gain	%Change
	M	SD	M	SD		
Total	123	17.1	151.0	27.1	28.0	22.8%
3-9 yrs (n=4)	115	17.3	136	22.6	21.0	18.3%
10+ yrs (n=5)	130	15.4	163	25.8	33.0	25.4%

Survey Results

All participants completed a survey at the beginning and end of the study providing their perception of reading progress, attitudes toward reading and reading practices in L1 and in English. In the post-study survey, the experimental group answered additional questions on their perceptions of the supplemental reading practice and the effectiveness of focused fluency instruction. Copies of the surveys can be found in Appendix A, and the results and analysis are presented in the following section.

Reading improvement

According to the survey responses, sixteen of the eighteen participants (two didn't respond to the question) said they felt like their reading improved during the course of the study. It's interesting to note that control group participants reported improvement during the course of the study. This improvement could result from reading practice in part-time or full-time ESL study, and possibly from conscious attention to reading by participation in this study and through answering the questions on the pre- and post- study surveys. Control group participants had the following comments about how they felt their reading improved:

I read faster and understand more vocabulary.

Yes, I know more words.

It's easier for me to read books in English.

I feel like my reading is faster than before.

All experimental group participants felt that their reading improved during the course of the study and that the supplemental reading practice was helpful. All stated that if offered, they would continue similar supplemental reading instruction because they liked it and felt it was helping them

read better. Their comments about their reading progress include:

Now I can read faster.

I feel more secure when I reading. Now it's fun.

My reading is very good

I learned to read fast.

Now I can read faster and understand almost all.

I'm reading fast, I'm better than before.

The experimental group said that all parts of the reading instruction – reading texts silently, listening-while-reading, reading out loud, graphing speed, answering questions, and writing – were helpful for their reading. The parts they found most helpful were listening-while-reading, reading aloud, and individual assistance with pronunciation.

Feelings about reading

Participants reported how they feel about reading – if they enjoy/don't enjoy, and rate difficulty they experience while reading in L1 and in English. Results are shown in

Table 7. The results show that overall in both L1 and English, more participants enjoy reading than don't enjoy it. The number of participants who reported that they enjoy reading in English increased by three during the course of study (two experimental group and one control group), and one participant reported a change in feeling about reading in English from "I don't like reading" to "I enjoy reading".

Overall, participants reported that reading in English is more difficult than in L1. All participants, with one exception, describe reading in L1 as "not difficult" or "not too hard". The majority of participants reported reading in English as "hard" or "not too hard". Five participants reported a change in the degree of difficulty of reading in English from pre-study to post. Three participants (one experimental group and two control group) said that reading in English was easier for them after the study, and two (one experimental and one control) reported that it was more difficult.

Table 7: Feelings about Reading

	<i>PRE</i>	<i>POST</i>	<i>PRE</i>	<i>POST</i>
EXPERIMENTAL	<i>L1</i>	<i>L1</i>	<i>English</i>	<i>English</i>
Opinion	No. answers	No. answers	No. answers	No. answers
<i>I enjoy reading.</i>	5	5	4	6
<i>I don't like reading</i>	3	2	1	0
<i>It's not difficult</i>	2	4	0	0
<i>It's not too hard</i>	2	1	3	2
<i>It's hard</i>	0	0	4	4
<i>It's very difficult</i>	0	0	0	0
CONTROL				
<i>I enjoy reading.</i>	9	7	4	5
<i>I don't like reading</i>	0	0	0	0
<i>It's not difficult</i>	4	5	1	0

<i>It's not too hard</i>	2	3	3	3
<i>It's hard</i>	0	0	3	3
<i>It's very difficult</i>	1	0	2	2

Reading frequency

In the surveys, participants reported how often they read in L1 and in English outside of class time. Results are shown in Table 8.

Most participants reported that they read once or twice a week or a few minutes every day in L1 and in English. Only two participants (one experimental group and one control group) claimed that they never read at home in L1 or English. At the end of the study, no participants reported they never read at home in English.

From pre- to post- study, participants reported some changes in the frequency with which they read. In L1, participants in the experimental group reported constant reading frequency, with one increasing from a few minutes every day to 30 minutes or more every day. In the control group, however, four participants reported increasing their L1 reading frequency from never or once or twice per week to a few minutes every day, and one participant increased from a few minutes every day to 30 minutes or more every day. One participant decreased L1 reading from once or twice per week to never. In English, three experimental group participants increased their reading frequency from never or once or twice a week to a few minutes every day. In the control group, two increased, one from never to a few minutes every day, and one from a few minutes every

day to 30 minutes or more every day. One experimental group participant and two control group participants decreased reading frequency.

Table 8: Reading Frequency in L1 and English

	<i>PRE</i>	<i>POST</i>	<i>PRE</i>	<i>POST</i>
EXPERIMENTAL	<i>L1</i>	<i>L1</i>	<i>English</i>	<i>English</i>
Frequency	No. answers	No. answers	No. answers	No. answers
<i>a. never</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>
<i>b. once or twice a week</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>1</i>
<i>c. a few minutes every day</i>	<i>4</i>	<i>3</i>	<i>3</i>	<i>7</i>
<i>d. 30 min. or more every day</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>1</i>
CONTROL				
Frequency	No. answers	No. answers	No. answers	No. answers
<i>a. never</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>
<i>b. once or twice a</i>	<i>5</i>	<i>3</i>	<i>3</i>	<i>4</i>

<i>week</i>				
<i>c. a few minutes every day</i>	3	3	3	2
<i>d. 30 min. or more every day</i>	0	2	2	3

Reading Materials

In the surveys, participants reported what kinds of materials they read in L1 and in English outside of class time. Results are shown in Table 9. In L1, the most popular reading materials were newspapers and books. In English, popular materials were newspapers, books, magazines, and homework. The most significant change pre- to post-study occurred with the experimental group and their reading materials in English. Pre-study there were collectively 10 responses of materials read, but after the study, there were 18 responses, indicating an increase in overall reading in English outside of class time.

Table 9: Reading Materials in L1 and English

	<i>PRE</i>	<i>POST</i>	<i>PRE</i>	<i>POST</i>
EXPERIMENTAL	<i>L1</i>	<i>L1</i>	<i>English</i>	<i>English</i>
Materials	No. answers	No. answers	No. answers	No. answers
<i>newspaper</i>	4	5	3	4
<i>books – sci-fi, self-help, history, romance, fantasy, children’s</i>	7	4	1	4
<i>magazines</i>	2	4	3	3
<i>homework</i>	0	0	1	3
<i>stories</i>	0	0	1	2
<i>letters</i>	1	0	0	1
<i>computer</i>	0	0	1	1
CONTROL				
<i>newspaper</i>	1	2	3	3
<i>books – sci-fi, self-help, history, romance,</i>	3	4	2	1

<i>fantasy, children's</i>				
<i>magazines</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>
<i>homework</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>1</i>
<i>stories</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
<i>letters</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>1</i>
<i>computer</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Conclusion

In summary, this chapter presented the results of the study. Pretest and posttest scores for the TABE and CASAS tests were tabulated and broken down by experimental group vs. control group, and by educational level - three to nine years of education vs. ten or more years of education. Reading speeds for the experimental group measured in words correct per minute (WCPM) for each of the reading instruction sessions are shown, as well as pre- to post-study progress and comparisons. Finally, pre- and post-study survey responses were discussed. In the following and final chapter, these results will be discussed and major findings and implications for research, teachers, students, and the greater community will be presented.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to determine if an intervention of a reading program that includes fluency training, *Reading Skills for Today's Adults*, would improve 1) overall reading proficiency, and 2) reading fluency, in a group of adult ESL learners. The data generated in this study lead to a few key findings about reading instruction and adult ESL students.

1. Focused fluency instruction of repeated readings and listening while reading (as part of a reading program) can improve the reading fluency of adult ESL students.

All participants in the experimental group benefited from the intervention and improved their reading speed. The average increase, 14.1 words per minute, following a relatively brief intervention (7-12 hours over six weeks), corresponds with other research that found similar results, and reported significant gains in reading speed (Bell, 1996; Frantatoni, 1999; Rasinski, 1990). In addition, through the surveys, all participants in the experimental group said they felt their reading was faster and better. The improvement in oral reading fluency is also a possible indication of comprehension improvement, as shown by the corresponding gain in TABE test scores.

2. Reading practice with focused fluency instruction may lead to increased academic reading skills comprehension as measured by the TABE test.

In contrast to little change in CASAS scores, the participants who received supplemental reading instruction showed significant gain in TABE scores – 9% - during the course of the study. Especially interesting are the scores broken down by educational level, in which the lower education level participants show an increase of 17%, while the higher education participants show a gain of 3%. This indicates the possibility that a

reading program such as *Reading Skills for Today's Adults* is an effective instructional technique to increase the academic reading skills of low-education students. Although the small sample size of this study doesn't allow significant conclusions, it shows the important trend of students with limited formal schooling benefiting the most from reading practice with fluency. More research through larger scale, longer term studies is needed to show conclusive results.

3. Adult ESL students show multiple benefits from supplemental reading practice.

Qualitatively, the study was a success. All experimental group participants noted in the survey that they felt their reading improved, and one participant specifically stated that she reads faster and understands more. Documented faster reading on the charts appeared to be a motivator and measure of success. At the end of the study participants wanted to continue the intervention, and requested of the program that we implement an ongoing class to keep it going. They said they wanted to continue reading and practicing, especially with areas they found most helpful – listening-while-reading, reading aloud, and individual pronunciation assistance.

4. Supplemental reading practice can lead to higher reading frequency and wider variety of materials read among adult ESL learners.

According to survey results, the participants who received supplemental reading practice increased the frequency with which they read and the variety of materials they read in English more than the control group. Could reading instruction that they enjoy

and feel is beneficial be the motivating factor to read more outside of school? Further research is needed in this area.

5. Standardized reading scores of assessment tools that test lifeskills (BICS) and academic reading skills (CALP) can vary greatly with ESL adult students, illustrating the gap between these two types of language skills.

The discrepancy between the relatively homogeneous range of CASAS scores (low intermediate to high intermediate) and the widely varying TABE scores (1.6-5.2) from this study show the discrepancy that exists in assessment tools for ABE adult reading. In addition to the score range, the progress made on these two tests further illustrates this discrepancy. The eighteen participants in this study showed very little average gain on the CASAS test. Desired gain pre- to post-test is 10 points, or around 12% on the CASAS, and the eighteen participants in this study showed much lower gain than that, approximately 1%. TABE results, on the other hand, showed larger gains. A .5 GE level increase in reading proficiency corresponds to an approximately 4% gain in score, and the experimental group participants showed, on average, a 16% gain during the course of this study.

These discrepancies between scores and progress on the two different types of reading assessment give support to the BICS and CALP distinction, and points to the need for more thorough, all-component reading testing and instruction with the educational background, skill level, and goals of the student in mind.

Further Research

In light of the increased fluency, increase in TABE test scores (especially lower education participants), and positive response from participants, this study indicates possibilities for the use of a program like *Reading Skills for Today's Adults* to help develop academic reading skills with adult ESL students. While the study shows possible connection between reading practice and reading proficiency, its limitations include a short duration of six weeks, and small sample groups. A longer term, larger study to examine the effects of a program such as *Reading Skills for Today's Adults* on fluency and overall proficiency would be an important follow up. Further study into the other components of the program – prereading, vocabulary, comprehension questions, and writing task - and their effects on comprehension and fluency would be important as well.

Another area of research resulting from this study is the effect of educational background and BICS vs. CALP abilities on the attainment of reading skills. This study

showed a correlation between years of education and academic reading proficiency progress, with lower education participants showing larger gains on the TABE from the reading practice, but more research is needed to better understand and quantify this connection. Similarly, the discrepancy between BICS and CALP proficiencies with adult ESL readers in this study points to the need for more research on assessment tools and educational practices for the widely-varying language skills of ESL adults.

Finally, further study on motivation and reading practices would be important.

What motivates students to read more? How does increasing reading frequency and kinds of materials at home aid in developing academic reading skills? Answers to these questions could help developing readers of all ages.

Future Action

In the ABE program where I work, the results of this study may lead to the establishment of a supplemental reading class using *Reading Skills for Today's Adults* or other texts with similar all-skills reading practice. It leads to the possibility of volunteers working with students in tutoring situations using the method, and educators incorporating fluency instruction and other reading strategies into the general ESL classroom. As an instructor, I will incorporate the findings of this study when teaching reading, and have a better understanding of fluency and reading development, especially with students who come to ESL with a limited educational background. As a researcher, I hope to share the results of this study with colleagues through publication and presentation of the findings.

Conclusion

With the increasing number of low-literacy adult ESL students within the ABE system, and the connection between literacy and economic success in the U.S., there is a strong and growing need for effective reading instruction and academic skills development. This study was an effort to better understand the reading difficulties and practices of a small group of ESL students in a large system. By increasing academic reading skills, students like Fardos move forward in their educational goals, and as she states, "*I will change my life and my dream from when I was a child will come true*". Hopefully researchers will continue to investigate and understand all aspects of reading of this highly motivated population, and develop instructional methods and materials so thousands of students can successfully meet their goals.

APPENDICES

APPENDIX A: Surveys

APPENDIX B: *Reading Skills for Today's Adults* example text

APPENDIX A

Pre-Study Questionnaire

Name _____

Age _____

1. How many years of school did you have in your country? _____
2. How long have you lived in the U.S? _____
3. How many hours do you study everyday at this school? 3 _____ 6 _____
4. Did you study English at other schools in the U.S? ____ If yes, how long? _____
5. Which is your first language? _____
6. Which other languages do you speak? _____
7. Please describe how well you read and write in the languages you speak, or how much you studied reading and writing in these languages.

8. What are your educational goals? Check all that are true for you.

<input type="checkbox"/> GED <input type="checkbox"/> Go to university <input type="checkbox"/> Read to my children <input type="checkbox"/> Other _____	<input type="checkbox"/> Go to community college <input type="checkbox"/> Help my children with homework <input type="checkbox"/> Get a good-paying job
---	---
9. How do you feel reading in your first language? Circle all that are true for you.

- a) I enjoy reading.
- b) I don't like reading.

- a) It's very difficult.
- b) It's hard.
- c) It's not too hard.
- d) It's not difficult.

10. How do you feel reading in English? Circle all that are true for you.

- c) I enjoy reading.
- d) I don't like reading.

- a) It's very difficult.
- b) It's hard.
- c) It's not too hard.
- d) It's not difficult.

11. How much do you read at home in your first language? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

12. What do you read regularly in your first language?

13. How much do you read at home in English? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

14. What do you read regularly in English?

Post-Study Questionnaire – Control Group

Name _____

1. Since January, do you feel like your reading improved? _____

If yes, how? _____

2. How do you feel reading in your first language? Circle all that are true for you.

- | | |
|--------------------------|-------------------------|
| a) I enjoy reading. | a) It's very difficult. |
| b) I don't like reading. | b) It's hard. |
| | c) It's not too hard. |
| | d) It's not difficult. |

3. How do you feel reading in English? Circle all that are true for you.

- | | |
|--------------------------|-------------------------|
| a) I enjoy reading. | a) It's very difficult. |
| b) I don't like reading. | b) It's hard. |
| | c) It's not too hard. |
| | d) It's not difficult. |

4. How much do you read at home in your first language? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

5. What do you read regularly in your first language?

6. How much do you read at home in English? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

7. What do you read regularly in English?

Post-Study Questionnaire – Experimental Group

Name _____

Since January, you have spent 12 hours of practice doing these things: **reading texts silently, listening while reading, reading out loud, graphing your speed, answering questions, and writing.**

1. Do you feel like your reading improved? _____

If yes, how? _____

2. Which part of the practice did you find the most helpful?

3. Which part of the practice wasn't helpful?

4. How do you feel reading in your first language? Circle all that are true for you.

- | | |
|--------------------------|-------------------------|
| a) I enjoy reading. | a) It's very difficult. |
| b) I don't like reading. | b) It's hard. |
| | c) It's not too hard. |
| | d) It's not difficult. |

5. How do you feel reading in English? Circle all that are true for you.

- | | |
|--------------------------|-------------------------|
| a) I enjoy reading. | a) It's very difficult. |
| b) I don't like reading. | b) It's hard. |
| | c) It's not too hard. |
| | d) It's not difficult. |

6. How much do you read at home in your first language? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

7. What do you read regularly in your first language?

8. How much do you read at home in English? Circle one.

- a) Never
- b) Once or twice a week
- c) A few minutes every day
- d) 30 min. or more every day

9. What do you read regularly in English?

APPENDIX B

Smoke Alarms Save Lives

Pre-reading

Questions:

- Do you have smoke alarms in your house?
- Have you practiced how to get out of your house if there was a fire?

Definitions:

- Alert – to make aware of, to warn
- Escape – to get away
- Injure – to hurt



Reading

Smoke alarms are very important. They sound an alarm to alert you in time to
 15 escape. Smoke alarms wake you up at night or alert you during the day to a fire.
 32 Smoke alarms save lives!

36 Unfortunately, every year about 12,000 children are injured or die in fires at
 49 home. Most happen in homes without a working smoke alarm. Even though most
 62 homes have smoke alarms, about one out of every three alarms is not working or is
 78 missing good batteries.

81 To protect your family, you should:

- 87 • Have a smoke alarm near, or inside every bedroom and on every floor or level
 103 of your home.
- 106 • **Test** the alarms once a month. Press the “test” button to see if the alarm will
 123 sound in a fire. Change the batteries twice a year. Change the batteries in the
 138 spring and fall when you change your clocks for Day Light Savings Time.
- 151 • Never take the batteries out of your alarm to use for something else. You might
 167 forget to put them back.
- 172 • Put smoke alarms in a high place on the wall or on the ceiling.
- 187 • Have family members practice different ways to get out of the house during a
 202 fire. Agree on a safe place to meet outside. Never go back into a burning house.
- 218 • Never allow anyone to smoke inside your home.
- 227 • Keep matches and lighters out of reach from children.

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Adapted from Iowa State University Extension Service

Level 4.5

Understanding

1. When should you change the batteries in your smoke alarms? _____

2. How many children are injured or die in fires at home every year? _____

3. Where should smoke alarms be placed? _____

4. What should family members practice? _____

5. What does the word **test** mean? _____

6. Why are smoke alarms important? _____

7. How often should you test your smoke alarm? _____

Writing

Choice A: Tell about a house fire that you have seen or read about.

Choice B: In your own words, write what you know about fire safety.

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