THE EFFECTIVENESS OF A REPEATED READINGS INTERVENTION WITH ENGLISH LANGUAGE LEARNERS

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Abstract: Repeated readings has been shown to be effective with monolingual students to improve both reading fluency and comprehension (Chard, Vaughn, & Tyler, 2002; O'Shea, Sindelar, & O'Shea, 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008); however, evidence for the effectiveness of this technique is more scarce with English Language Learners (ELLs). The purpose of this study was to investigate the effectiveness of a basic repeated readings intervention with ELLs for strengthening their reading fluency and comprehension. Three elementary students from a school in northern Oklahoma participated in the intervention for approximately 15 minutes each school day for approximately 6 weeks. DIBELS passages were used to assess reading fluency. AimsWeb Maze passages were administered during three baseline sessions and three return-to-baseline sessions to measure comprehension. Treatment integrity and inter-rater agreement were also assessed. Change in the trend, level, and variability in the participant's performance during the intervention were evaluated to determine the effectiveness of the intervention. The students did not respond to the repeated readings intervention in reading fluency or reading comprehension. Changes were made to the intervention, such as by adding error correction, modeling, or goal setting; however no significant impact occurred. Directions for future research with ELL students include comparing the effects of a repeated readings intervention alone with a repeated readings intervention that includes other components such as error correction, modeling, or goal setting. Another important aspect for future research is to understand how students' age and amount of exposure to English impact the effect of reading interventions such as repeated readings.

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CHAPTER 1

INTRODUCTION

The United States has been a destination for individuals and families to have a fresh start since before it was legally a country. This has created a melting pot of culture, ethnicity, and language. Despite this variety, students in most of today's schools are expected to read, write, and speak English from the day they walk in the door if they want to succeed. Finding ways to allow every child to succeed, especially students with Limited English Proficiency (LEP), is essential (U.S. Department of Education, 2004). The foundation for education is reading. Almost every subject, even mathematics, relies on reading. For this reason, it is especially important for these students to learn to read in English. Research is needed to find the best intervention methods that not only allow the students to learn to read, but to learn to read at a rate that will allow them to function in the classroom at the same or a similar level to their same age-level peers.

The Importance of Oral Reading

As it is impossible to measure a student's reading errors and speed while they read silently to themselves, having the student read aloud is most commonly used to measure their overall reading ability. There are different ways to measure oral reading, but the most prominent method is oral reading fluency. Measurement of oral reading

fluency involves having the student read for a specified amount of time and calculating both the number of words read correctly and incorrectly, allowing a percentage of words read correctly to be determined. Although research has clearly shown that oral reading fluency predicts reading accuracy and comprehension for monolingual students, there are mixed findings regarding the question of whether oral reading measures predict silent reading ability for children learning to read a second language (Gottardo, Chiappe, Yan, Siegel, & Gu, 2006; Miller, Heilmann, & Nockerts, 2006; San Francisco, Mo, Carlo, August, & Snow, 2006). A recent study concluded that reading fluency is not as closely linked with reading comprehension for English language learners as for native speakers of English, and that for this population, fluency tends to overestimate comprehension (Quirk & Beem, 2012).

Repeated Reading Interventions

Despite the fact that findings regarding oral reading fluency in bilingual students is mixed and that students are often required to read silently both in the classroom and outside of the classroom, investigations have shown that oral reading results in more improvement than silent reading (National Reading Panel [NRP], 2000). Oral reading was shown to have a positive influence on many skills including word recognition, fluency, and comprehension, while silent reading alone was shown to be an ineffective intervention for improving reading fluency and other reading skills (NRP, 2000). Fuchs, Fuchs, Eaton, and Hamlett (2000) examined the relationship between oral reading, silent reading and comprehension. Students who read orally performed significantly better than those who read silently (Fuchs et al., 2000).

One common intervention method used to increase oral reading fluency (ORF) is *repeated readings* (Chard, Vaughn, & Tyler, 2002; O'Shea, Sindelar, & O'Shea, 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008). Repeated reading interventions require students to read more than one time during a session. Students read either the same passage over and over or they read different passages each attempt (Vadasy & Sanders, 2008).

Oral Reading Fluency Intervention for Bilingual Students

Calhoon, Al Otaiba, Cihak, King, & Avalos (2007) examined the effects of peer assisted learning strategies (PALS), a peer mediated reading skill acquisition program on ELL students. DIBELS administration was conducted before the program began (the Fall), in the Winter, and then after the program was completed (Spring). Letter naming fluency (LNF), nonsense word fluency (NWF), and phoneme segmentation fluency (PSF) were the DIBELS subtests completed with each student. Oral reading fluency (ORF) was also assessed in each students at these times. ELL students in the PALS intervention condition were not significantly different from ELL control students prior to the beginning of the study. However, results favored the ELL students in the PALS program, especially on NWF and LNF. A moderate effect was also seen with ORF and a small effect was seen with PSF. Overall, PALS did not result in a significant increase in the participating ELL students ORF (Calhoon et al., 2007).

One study completed with ELL students in middle school failed to produce significant improvement in the participants reading fluency or any other reading skill (Denton, Wexler, Vaughn, & Bryan, 2008). The intervention in this study was a modified version of a phonics-based remedial program, which includes ESL practices, vocabulary

instruction, fluency, and comprehension strategies. Students who were eligible for the study (read less than 80 words per minute) were divided into either a treatment or control group. Results showed only a small improvement in reading skill in both the treatment and control groups and there were no significant differences between these two groups. These results suggest that this particular intervention is not beneficial to ELL students in middle school (Denton et al., 2008).

How is Comprehension Affected?

Comprehension is the ability for a reader to understand and recall text that they have read, whether orally or silently. Comprehension is an important part of reading development (Snow, Burns, Griffin, 1998) and is often developed after fluency has been mastered (Chard et al., 2002; Fuchs, Fuchs, Hosp, & Jenkins, 2001). This skill can be measured using several different methods. Some examples include cloze tasks, where key words are removed from a passage and replaced with multiple words. The student must choose which word fits in the story. Another comprehension measure is norm-referenced tests, which are often administered in groups and require the students to read silently and then answer questions about the text (Klingner, 2004). Informal reading inventories require the student to answer two types of questions about a passage: those which can be answered with facts from the passage and those which require the student to hypothesize about what may happen or what the main character(s) might like. Retelling requires the student to restate as much of the text as they can. Interviews and questionnaires require the student to answer questions directly about the text they have read. These questions can be multiple choice, short answer, or even simple who, what, where, when, and why questions (Klingner, 2004). Researchers have begun to study the relationship between

comprehension and an ELL's L1 and L2 (Sparks, Patton, Ganschow, Humbach & Javorsky, 2008; Swanson, Sáez, & Gerber, 2006; Wang, Cheng, & Chen, 2006).

A study by Wang, Chang, and Chen (2006) was among the first to examine the cross-language morphological transfer in learning two languages simultaneously. The smallest unit that can be associated with grammatical functions and meaning in any language is a morpheme. Morphological awareness is a child's ability to understand the "morphemic structure of words and their ability to reflect on and manipulate that structure" (Carlisle, 1995, p. 194). Comprehension was measured along with morphological and phonological awareness, word-reading, and oral language proficiency in both Chinese (L1) and English (L2; Wang et al., 2006). Children were instructed to read the paragraphs and then answer multiple-choice questions referring to the passages. English comprehension was correlated with age, English grade level, English oral vocabulary, English phoneme deletion, English compound and derivational morphological awareness, and Chinese reading comprehension. Chinese reading comprehension was correlated with age, Chinese grade level, Chinese and English compound and derivational morphology, English oral vocabulary, English word reading, English reading comprehension, and Chinese character reading. After controlling for age, grade significantly contributed to Chinese reading comprehension, but not English reading comprehension, suggesting that in these students, learning has more impact on L1 than L2 after considering age. The skill of English compound morphological skill also contributed to Chinese reading comprehension beyond age, Chinese grade level, Chinese vocabulary, and English phoneme deletion (Wang et al., 2006).

One study suggested that the earlier children are exposed to a language, before instruction in the skills of reading, the stronger their comprehension skills may be (Sparks et al., 2008). In this study, they followed students from first grade through their second year of foreign language instruction in high school to examine the effects of L1 reading skills on later L2 reading skills. L1 reading comprehension was the best predictor of L2 reading comprehension, however L1 reading comprehension and other measured reading skills did not account for all of the variance in L2 reading comprehension. This may be because with L1 education, students begin with oral vocabulary and then gradually increase in difficulty of grammatical knowledge and overall reading skill. When students begin L2 instruction at a later age, such as high school, they are attempting to learn all of these skills at once, which may explain why some students seem to have difficulties developing reading comprehension skills in L2 even when they are strong in L1 reading skills (Sparks et al., 2008).

Comprehension Interventions with Bilinguals

Comprehension is important to measure as it ensures that the reader understands what he or she reads, not just understands how to decode the words. Measuring comprehension with ELL students is also important for these reasons. Several studies have examined the effects of intervention on comprehension (Fung, Wilkinson, & Moore, 2003; Kolić-Vehovec & Bajšanski 2007; O'Donnell, Weber, & McLaughlin, 2003).

Kolić-Vehovec and Bajšanski (2007) hypothesized that comprehension monitoring and other meta-cognitions would be important for higher elementary school reading comprehension in bilinguals. The study used open-ended questions, the Metacomprehension Test (Pazzaglia, De Beni & Cristante, 1994), and a cloze test to

evaluate comprehension in participants. Results from a regression analysis revealed that grade, perceived language proficiency, as well as both measures of comprehension monitoring were significant predictors of reading comprehension; however age of L2 acquisition was not a significant predictor and perceived use of reading strategies did not significantly contribute beyond the effects of the other components. Results revealed that reading comprehension and monitoring may develop at an intensive rate in the late elementary grades (Kolić-Vehovec & Bajšanski 2007).

Another study used two experiments in order to determine if combining listening passage preview and discussion of key words would increase the participants ORF and reading comprehension (O'Donnell et al., 2003). The study also examined whether the results would be maintained over a six-month time frame. Intervention demonstrated an increase over words read correctly and comprehension questions answered correctly as the participant performed higher during intervention sessions and would return to similar levels when baseline was reimplemented. Experiment 1 was extended to determine if the intervention would continue to have an effect over time. This later intervention was the second experiment of this study. Experiment 2 was conducted on the same student and in the same format as Experiment 1. It began two weeks after the maintenance period was concluded. Once again an increase was demonstrated with words read correctly and the number of comprehension questions answered correctly during the intervention sessions (O'Donnell et al., 2003)

Fung et al. (2003) attempted to determine the effectiveness of their L-1 assisted reciprocal teaching in its ability to improve limited-English-proficient students' comprehension of English expository text. Results demonstrated that most students

improved significantly in comprehension skills from baseline to intervention and that this progress was maintained weeks later. Students also demonstrated more different strategies from pre- to post-test (Fung et al., 2003).

Present Research

The present research used some of the common components of oral reading fluency research with monolingual students to examine if they are also effective with bilingual students. A repeated readings component was used to increase fluency. Also, as it is important to ensure that bilingual students understand what they read, rather than just simply learning how to decode English, a comprehension measure was used to progress monitor this skill. It was hypothesized that the repeated readings condition, often effective with monolingual students, would also increase the fluency of bilingual students.

Research Questions

1. Will use of the repeated reading intervention increase English language oral reading fluency for the participating ELL students?
2. Will use of the repeated reading intervention increase English language reading comprehension for the participating ELL students?

Research Hypotheses

1. Use of the repeated reading intervention will increase English language oral reading fluency for the participating ELL students.
2. Use of the repeated reading intervention will increase the English language reading comprehension of the participating ELL students.

CHAPTER 2

LITERATURE REVIEW

As the population in the United States continues to grow, so does its diversity (U.S. Census, 2000). About one in five Americans speaks a language other than English at home (U.S. Census, 2000). Nearly half of all U.S. classrooms have at least one student who speaks a language besides English (U.S. Department of Education, 2004). Many children speak one language at home and then are expected to use another language at school (*sequential bilinguals*). Others grow up learning two languages at the same time (*simultaneous bilinguals*; Toppelberg, Munir, & Castañon, 2006).

With the growing diversity among our country's youth, schools can no longer expect all students to benefit equally from English-language instruction from the day they enter kindergarten (U.S. Department of Education, 2004). The increasing number of children who enter school with limited English skills would benefit from educational interventions tailored to their needs, such as transitional classrooms or English reading interventions. This need for additional instructional support is especially important for reading instruction. Not only is reading a major area where the differences in languages collide, but it is fundamental for many other subjects taught in school. Because reading is a prerequisite skill for learning in many other subject areas, it is especially crucial for all

struggling readers to receive timely assistance. This need is even more important for English language learners (U.S. Department of Education, 2004).

Other reasons for providing prompt and effective reading interventions to ELL students have to do with identification of learning disabilities. Non-native speakers of English who do not receive special reading assistance risk having their reading difficulties inappropriately perceived as a learning disability. Conversely, educators may misattribute the reading difficulties manifested by an ELL student with a true learning disability in reading to unfamiliarity with the English language, and as a result the student's disability may remain unaddressed for far longer than it would in a monolingual English speaker (D'Emilio, 2004).

A variety of reading intervention tools have been developed in past decades, such as repeated readings, listening passage preview, and error correction. Unfortunately, many reading interventions were developed in response to the needs of monolingual children with reading difficulties (U.S. Department of Education, 2003; Vaughn, Mathes, Linan-Thompson, & Francis, 2005). However, differences between children's first language and English in sound-symbol relationship, word order, grammatical structure, or script forms may call for interventions with documented evidence of effectiveness specifically with bilinguals.

What are Best Practices for Working with Bilinguals?

As the diverse population of bilingual students in American schools continues to grow, so does the need for professionals trained and experienced in how to teach these children. Unfortunately, only a limited number of teachers and other professionals are adequately trained to help English language learners (Scribner, 2002). Many schools do

not offer extra services, such as transitional bilingual classrooms or English as a second language (ESL) classrooms. Many schools that do offer such programs employ teachers who may speak the students' native language, but who cannot read or write the language, which may limit their ability to help these children improve their literacy skills. Without extra support, many children will struggle to integrate into the mainstream classroom. School psychologists should be prepared to assist professional educators in assessing and creating effective and unbiased interventions for bilingual children (Ortiz, 2002; Scribner, 2002).

A variety of instructional methods have been developed to strengthen the literacy skills of English language learners (ELLs; Scribner, 2002). One teaching strategy recommended for facilitating the language development of ELLs is to teach students to notice context clues and to connect new material to their own life experiences. A second teaching method involves encouraging students to make predictions, analyze situations, offer their own opinions, draw conclusions about the class materials, and to be otherwise actively involved in the learning process. A third mechanism suggested for helping ELLs is to encourage them to take an active role in the classroom through the use of cooperative learning activities. A fourth educational approach involves pre-teaching new concepts and vocabulary to help learners extend their emerging reading skills to new content areas. A fifth technique for helping ELLs develop English skills involves presenting lessons using a consistent format to allow students to more easily anticipate the structure of each lesson, thereby lessening their cognitive burden and allowing them to focus on the linguistic aspects of the task at hand (Scribner, 2002). Bilingual children create an added challenge for teachers and professionals, but as it is their job is to help

children reach their academic potential, extra work and research is essential (Ortiz, 2002; Ortiz & Flanagan, 2002; Scribner, 2002).

Children are often raised learning a diverse number of languages, and some children learn two or three languages while growing up. In this paper, to more clearly communicate findings pertaining to dominant and non-dominant languages, we will distinguish children's first language as 'L1', their second language as 'L2', and so on. For example, if a study examined Hispanic children studying in a school where the population is mostly English speakers, discussion of the research will refer to L1 (Spanish) and L2 (English) as needed.

Verbal versus Literacy Skill Development in Bilingual Individuals

One of the most important issues when discussing ELLs' language development is to distinguish between the development of basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP; Cummins, 1979). BICS is the ability to hold a conversation, while CALP includes more advanced skills such as reading, and writing. In monolingual children, BICS develops early and often before children enter school. BICS is often based on social language and monolingual children develop it from family and friends prior to entering school. ELL students on the other hand, often develop BICS on the playground or in other settings with their peers. In contrast, CALP develops later, often after children enter school, and continues to develop throughout their education. The difference in developmental timelines between BICS and CALP is important to bear in mind when working with ELL students. Whereas their BICS will often develop within the first couple of years, it may take up to five years for

an ELL child to reach grade level in reading, writing, and other academic skills that make up CALP. (Collier & Thomas, 1989; Crockett & Brown, 2009; Cummins, 1979).

Crockett & Brown (2009) discussed these two types of skills involved in second language development in even more detail. At usually only one or two word responses, students begin with Early BICS at approximately six months to two years of instruction. Students can express their basic needs and write personal information at this stage and instruction should focus on vocabulary development with many repetitions and feedback (Crockett & Brown, 2009).

Students next develop Intermediate BICS as they move to the speech emergence stage, which occurs at approximately two to three years of instruction. Oral and written responses and the ability to use routine English phrases become much easier for students at this point. Although the student may sound fluent in the social setting, they have not fully obtained academic comprehension of the English language. At this time, instruction should focus on language forms and functions, vocabulary, and oral language (Crockett & Brown, 2009.)

The final BICS, Advanced BICS, is experienced at approximately years three and four of instruction and is associated with the intermediate fluency stage of reading. Students often have good oral comprehension skills, are able to use English to communicate in complex sentences, can use the language to study content-specific areas, and they are able to express and represent their thoughts using English. Fluency, academic vocabulary, and metaphoric and figurative language should be the focus of instruction (Crockett & Brown).

The final skill in second language development is Emerging CALP. This skill corresponds with the advanced fluency stage or reading and occurs at approximately five plus years of instruction. Students often take much longer (sometimes up to ten years) to reach this stage if they do not receive instruction in their native language simultaneously during at least some portion of their education. At the Emerging CALP level, the student is able to effectively communicate regarding a variety of topics, comprehend concrete and abstract topics, can participate fully in all content areas at grade level, and is able to interact with different types of people. At this stage, the student is working on a better understanding of figurative language. Oral fluency and academic vocabulary, along with the opportunity to practice abstract concepts should be the focus of instruction (Crockett & Brown, 2009).

Teaching ELL students to read fluently in English must go beyond the very basics of reading instruction. Readers who have a well-developed English oral proficiency have skills associated to reading such as: English vocabulary knowledge, listening comprehension, syntactic skills, and the ability to define words. Strong skills in these areas are linked to reading comprehension and writing skills (August & Shanahan 2006). Those LEP students who are unable to reach BICS prior to beginning instruction in CALP often are able to perform equal to native English speakers on skills such as word decoding, word recognition, and spelling; however, their reading comprehension and writing skills are often below the level of their peers (August & Shanahan 2006).

Although an ELL student may be able to converse with their peers or teacher in English, it does not mean they are able to read and comprehend the same language, at least at the same level as their peers who have been speaking and learning in the language

since birth. Reading acquisition is a developmental process and so is second language acquisition. The process takes years and research has shown that educational efforts will be ineffective if an ELL child is placed in the regular education classroom when they have developed BICS, yet are expected to perform at the same level as their peers. This is especially true if no primary language support is provided (Collier & Thomas, 1989; Crockett & Brown, 2009; Cummins, 1979).

Component Skills Important for Reading in English

Regardless of the age of the learner and which language he or she is learning, it is important to follow valid procedures for measuring reading skills (Durgunoğlu, Mir, & Arino-Marti, 1993; Durgunoğlu & Oney, 2002). There are many constituent skills that can be measured to obtain an accurate assessment of reading ability in both monolingual and bilingual individuals (Bialystok, Majumder & Martin, 2003; Cisero & Royer, 1995; Comeau et al., 1999; Durgunoğlu, Nagy & Hancin-Bhatt, 1993; Durgunoğlu & Oney, 2002; Gottardo, Wilfrid, Yan, Siegel, & Wade-Woolley, 2001; Gottardo et al., 2006; LaFrance & Gottardo, 2005; Lindsey, Manis & Bailey, 2003; Manis, Lindsey & Bailey, 2004; San Francisco et al., 2006). Examples include phonological awareness, reading fluency, comprehension, and spelling, which will be discussed in more detail at a later point in this paper. A better understanding of the component skills important for reading in English makes it easier to weigh the relative importance of each skill, which in turn helps education professionals understand why some children experience reading difficulties and points the way to the correction of any problems children are experiencing.

The Role of Cross-Linguistic Transfer

Experts propose that the particular skills that individuals need to develop literacy in a new language depends on specific aspects of their dominant language and of the new language. In order to determine effective ways to instruct English language learners, the relationship between the learner's L1 and L2 skills must be clearly understood. Many researchers are examining 'cross-linguistic transfer' in an effort to better understand this relationship. Individuals use cross-linguistic transfer when they apply skills that they use with one language to another language, thereby allowing the skills to be used in the second language without having to be learned all over again (Cisero & Royer, 1995; Comeau, Cornier, Grandmaison, & Lacroix, 1999; Dickinson, McCabe, Clark-Chiarelli, & Wolf et al., 2004; Durgunoğlu, Nagy et al., 1993; Durgunoğlu & Oney, 2002; Friedenberg, 1984; Gottardo et al., 2001, 2006; Lindsey et al., 2003; Manis et al., 2004; Miller et al., 2006; Wagner, Spratt, & Ezzaki, 1989).

Relationships between L1 and L2 have been examined in relation to many different foundational skills required for L2 reading. Students learning to read in a new language have been observed spontaneously displaying cross-linguistic transfer in their 'print awareness' (understanding print concepts, such as which way a book should be held); letter knowledge; and rapid serial naming (tasks that require a student to identify letters, sounds, objects, etc quickly, one after the other; Lindsey et al., 2003). For some literacy skills, evidence for cross-language transfer is found only at certain periods of language development. For example, in one study accuracy in initial phoneme detection was associated with L2 performance at one time but not at a later time (Cisero & Royer, 1995). While many reading skills demonstrate cross-linguistic transfer (Lindsey et al.,

2003; Manis et al., 2004), phonological awareness often demonstrates one of the strongest relationships (Comeau et al., 1999; Dickinson et al., 2004; Durgunoğlu, et al., 1993; Gottardo et al., 2001, 2006; Lindsey et al., 2003; Manis et al., 2004).

Research on phonological awareness has demonstrated the importance it has for the overall reading skills of bilingual children (Bialystok, Majunder, & Martin, 2003; Comeau et al., 1999; Dickinson et al., 2004; LaFrance & Gottardo, 2005; Lindsey et al., 2003). Evidence shows that beginning bilingual readers generalize their phonological awareness skills from their native language to their new language. In one study, children with average oral language and reading scores in L1 (Spanish) were observed to generalize their phonological awareness skills to L2 (English; Manis et al., 2004). A second investigation also reported transfer of phonological awareness skills from L1 to L2 when the L1 was English and the L2 was French. This study also found that phonological awareness predicted word-decoding skills within each of these two languages (Comeau et al., 1999).

Not only do phonological awareness skills in L1 assist beginning readers in learning phonological awareness skills in L2, but phonological awareness in L1 also predicts other literacy skills in L2. One study of native Spanish speakers indicated that phonological awareness skills in Spanish predicted word recognition skills in L2 (English; Durgunoğlu, Nagy et al., 1993). Another investigation of a native Chinese speaker found that the ability to detect rhymes in Chinese predicted phonological processing and reading ability in L2 (English; Gottardo et al., 2001). Measuring oral reading accuracy in children is important for determining what point they have reached in their development of literacy skills (CALP; Cisero & Royer, 1995; Geva, Wade-Woolley

& Shany, 1997). Accuracy on an initial phoneme task (requiring students to identify the beginning phoneme of a word or pseudoword) in their L1 predicts the gain students subsequently make on this task in their L2 (English; Cisero & Royer, 1995).

Findings by Dickinson et al. (2004) further underscore the importance of cross-linguistic transfer by suggesting that early readers' generalization of phonological awareness skills across languages is, in fact, bidirectional. In their examination of native Spanish speakers, Dickinson et al. (2004) found that not only were initial phonological awareness skills in Spanish the best predictor of later phonological awareness skills in L2 (English), but that the children's early phonological awareness skills in English also were the best predictor of their later phonological awareness in Spanish (Dickinson et al., 2004). These findings support the practice of helping bilingual children develop their language skills in their native languages in bilingual classrooms to help them acquire phonological awareness in L1, in order to facilitate transfer of this skill to their new language (Dickinson et al., 2004).

It seems that some skills, particularly phonological awareness, need to be learned only once, as their effects may generalize automatically to other languages (Durgunoğlu, Nagy et al., 1993; Gottardo et al., 2006). Students who perform well on phonological tasks in their L1 are more likely to perform well on L2 reading tasks. If this is true, it may be necessary to continue to enhance this skill only in their primary language rather than focus on the skill in L2 (Durgunoğlu, Nagy et al., 1993; Gottardo et al., 2006).

The Advantages of Bilingualism

The belief that learning a second language can be detrimental to children or that they should not continue to learn their first language while they are learning a second

language has been shown to be false (Dickinson et al., 2004; Friedenberg, 1984; Miller et al., 2006; Wagner et al., 1989). In fact, research has shown that providing reading instruction in children's native language also strengthens their reading skills in their second language. Results of one study demonstrated that bilingual children who received reading instruction in L1 (Spanish) did better on L2 (English) reading tasks than those who had reading instruction in L2 (English) alone (Friedenberg, 1984). In another study, the L2 (English) oral language measures were associated with L1 (Spanish) language measures (Miller et al., 2006). This study demonstrates cross-language transfer as strengths in the native language positively influence second language reading achievement (Miller et al., 2006).

One of the biggest findings supporting bilingualism comes from Wagner et al. (1989), who examined children from two different language backgrounds (Arabic and Berber) in Morocco. Arabic was the main language used in the schools, and later the children also were instructed in French. While at the beginning of their school careers, the monolingual (Arabic) children outperformed the Berber-speaking children in Arabic, after five years of schooling the native Berber speakers had caught up with the native Arabic speakers. Subsequent analyses of all the children's acquisition of literary skills in French showed that regardless of which was their native language, children's French literacy skills were best predicted by their literacy skills in their first language. For these children, French literacy skills were best predicted by the reading skills in Arabic for the native Arabic speakers, whereas they were best predicted by the children's reading skills in Berber for the native Berber speakers. Evidence was found for cross-language transfer, even though the languages differed in orthography (alphabet), lexicon (vocabulary), and

syntax (grammatical structure). This important study demonstrated that acquisition of reading skills in a reader's second or third language depends on the extent of the reader's literacy skills in their native language. Moreover, as a child becomes more proficient in multiple languages, this relationship becomes stronger (Wagner et al., 1989).

Impact of Providing Reading Interventions in L2

Some research with English Language Learners has used English language interventions to improve the English reading skills of ELL students (Dufrene and Warzak, 2007; Gerber et al., 2004; Vaughn, Linan-Thompson, & Hickman, 2006 & Vaughn, Linan-Thompson, Mathes et al., 2006). This research has involved evaluating the effectiveness of listening passage preview (LPP), Repeated Readings (RR), the combination of LPP and RR (Dufrene and Warzak, 2007), training in early literacy skills and word identification (Gerber, Jimenez, Leafstedt, Vallaruz, Richards, & English et al., 2004; Vaughn, Linan-Thompson, Mathes, Carlson,Hagan, Pollard-Durodola, et al., 2006; Vaughn, Linan-Thompson, Mathes, Cirino, Carlson, Pollard-Durodola, et al., 2006), connected text practice (texts that contain high-frequency words) and comprehension (Vaughn, Linan-Thompson, Mathes, Carlson et al., 2006 & Vaughn, Linan-Thompson, Mathes, Cirino et al., 2006). A series of studies by Vaughn, Linan-Thompson, Mathes, Carlson et al., 2006 & Vaughn, Linan-Thompson, Mathes, Cirino et al., 2006 aimed to improve ELL students' reading in both L2 (English) and L1 (Spanish) by providing intervention in L2 (English). Students in these studies were at-risk first grade English Language Learners. The interventions were designed to teach reading skills such as phonological awareness, word recognition, fluency, and comprehension in the English language. Significant gains were seen in L2 (English) for the intervention students, and

improvements in L2 (English) reading were significantly higher than those made by students who did not receive instruction in skills such as phonological awareness, letter-sounds, reading efficiency, and comprehension. Gains in phonological awareness were also observed in L1 (Spanish) (Vaughn & Mathes et al., 2006a). Vaughn, Linan-Thompson, Mathes, Carlson, et al., 2006 also demonstrated improvements in L2 (English) for ELL students. More research is needed in this area in order to better understand how the different intervention languages benefit ELLs. For example, the nature of the impact of instruction in one language on skills in the other is not yet well understood. Questions remain about the possible moderating effect of student skill level and age (Vaughn, Linan-Thompson, Mathes, Carlson, et al., 2006).

Accuracy in Reading

Accuracy in reading is the ability to read words without errors. Usually accuracy is measured as the percent of words in a passage read correctly a reader reads orally, as it is difficult to assess reading errors that children make when they read silently to themselves. Students with better-developed oral language skills are more accurate in their oral reading (Cisero & Royer, 1995; Geva et al., 1997). Research has shown that students are more accurate in oral reading in their L1 (whether English or Spanish) than they are in their L2 and that students who read with high levels of accuracy are better able to comprehend the material they read (Geva et al., 1997).

Geva et al. (1997) examined oral reading accuracy in L1 (English)-speaking children who were learning L2 (Hebrew). They found that when the children were in first grade their accuracy in reading L1 (English) differentiated the good and poor readers not only in L1 (English), but also in L2 (Hebrew). However, by the end of grade 2, the

benefits of first language proficiency almost disappeared. Thus it appears that over time, instruction in L2 (Hebrew) resulted in the benefit of more L1 (English) accuracy being limited. (Geva et al., 1997).

Response to Intervention

Historically, the method most often chosen by schools to diagnose learning disabilities utilizes the IQ-achievement discrepancy. In this method, a child's score on a standardized intelligence test must be 'significantly different' than their achievement scores. Unfortunately, for as long as this method has been in use, controversy has surrounded it. The goal of many researchers has been to develop a better method to identify learning disabilities (LD; Vaughn & Fuchs, 2003). As of the 2004 revision of the Individuals with Disabilities Education Improvement Act, a method entitled Response to Intervention (RTI) can now be used in determining eligibility for special education (Klingner & Edwards, 2006). It can also be used to help identify a learning disability in skills such as reading. Many experts believe that this method shows promise, especially for the linguistically diverse population for better discriminating between those who are simply behind and those with an actual disability (Klingner & Edwards, 2006).

RTI service delivery consists of four major components: multiple tiers of instruction, curriculum-based assessment, evidence-based instruction, and a problem-solving orientation (Barnes & Harlacher, 2008). On prominent model features three tiers of instruction. With this method, all students are screened early for any problems in reading and those identified as "at risk" are provided with more instruction in the areas in which they most struggle. If after these intervention sessions the child is still experiencing difficulties, recommendations for special education would be considered

(Vaughn & Fuchs, 2003). In Tier I, curriculum based measures (CBM) are used to measure the knowledge and ability of every child in the school compared with his or her classroom curriculum. Those students identified as needing more intensive interventions enter Tier II. Tier II students receive small group or other specialized instruction. Upon receiving specialized instruction students' whose scores rise to an acceptable range are released from the interventions and may return to Tier I. However, if the student's performance does not improve adequately given Tier II instruction, they progress to Tier III. In Tier III, an intervention plan is developed by a team of professionals for providing special education or other intensive services (Klingner & Edwards, 2006; Vaughn & Fuchs, 2003).

No two RTI models are the same, and each school does RTI a little bit differently (International Reading Association, 2010). The unique thing about RTI is allows schools to design interventions for students or groups of students that are differentiated in need and intensity based on what areas they struggle in and how far they are behind their peers. One of the most important aspects of RTI is that decisions are based on data and that interventions are research-supported. Students may receive interventions for varying lengths of time. One students could receive an intervention in a single skill for only a few weeks. Another student could receive interventions for years. Yet another student could receive intensive interventions for a couple of months, but after showing no response to the intervention, the team could decide special education was a better fit for the student. The language of RTI should be about helping students fill gaps in their learning, rather than assuming students have permanent disabilities (International Reading Association, 2010).

Compared to research with monolingual students, evidence for the effectiveness of RTI models for English language learners (ELLs) is scarce but growing. To date, RTI appears promising with bilingual students. Just as each reading intervention method is unique, so are RTI techniques, as the best are modeled to each specific child. ELL students are likely to have even more gaps than monolingual students in their reading, and while they may be strong in one area, they could be weak in another. RTI interventions suggests a promising method of helping these students close these gaps (International Reading Association, 2010).

Intensive Skill Training. With some RTI studies ELL students received intensive training in such skills as phonological awareness, understanding sound-letter relationships, reading fluency, reading comprehension, and spelling (Gerber et al., 2004; Healy, Vanderwood, & Edelston et al., 2005; Leafstedt, Richards, & Gerber et al., 2004; Linan-Thompson, Vaughn, Hickman-Davis, & Kouzekanani et al., 2003; Linan-Thompson, Vaughn, Prater, & Cirino et al., 2006; Vaughn, Linan-Thompson, & Hickman, 2003). Vaughn et al. (2003) provided intensive intervention to bilingual students who were struggling readers in second grade. Each intervention session included instruction and practice in several different reading skills: phonemic awareness, phonics, fluency, instructional level reading and comprehension, as well as spelling. The intervention was provided for 35 minutes a day in small groups and included many types of intervention components from repeated readings for improving fluency to word analysis for improving spelling. The study lasted a total of 40 weeks, but was divided into 10-week sessions (4 total) and students were assessed at the end of each session. As students met exit criteria by obtaining passing scores on each of the assessment

instruments, they discontinued participation except for continued assessments of ability. Many of the students were exited after the first or second session (Vaughn et al., 2003). All of the bilingual students successfully completed the program and returned to their regular classrooms. Most students who exited the intervention after the first 10 weeks continued to improve in the general education setting without the need of supplemental instruction (Vaughn et al., 2003). All the bilingual children showed the most improvement within the first 10 weeks of instruction and more than doubled their scores on the Test of Oral Reading Fluency (TORF; Children's Educational Services, 1987; Vaughn et al., 2003).

Linan-Thompson et al. (2003) implemented an intervention with second grade students "at-risk" for reading problems, many of whom were English Language learners. Skills such as phonological awareness, word study (instruction in alphabetic principles and how to break apart words), fluency reading, passage comprehension, and writing, were addressed during each intervention session. Students were provided with repeated readings, timed writings, and literacy skill training the intervention for a total of 13 weeks with daily sessions lasting 30-35 minutes throughout that time. Gains in reading ability were made from the beginning of the intervention; however, the only significant improvements for English language learners were in passage comprehension and segmentation fluency (Linan-Thompson et al., 2003).

The Importance of Oral Reading

Oral reading skills have often been measured in several different ways. One prominent method of measuring oral reading skill is with a measure of oral reading fluency. Measurement of oral reading fluency involves having the student read for a

specified amount of time and calculating both the number of words read correctly and incorrectly, allowing a percentage of words read correctly to be determined.

Oral Reading Fluency

Snow et al. (1998) discussed the typical development of reading skills as monolingual students progress through elementary school. In kindergarten, children learn to identify the names of letters and begin to develop the concept of letter sound and phonological awareness. In the first grade, students expand their phonological awareness and phonic skills and begin to expand their sight-word vocabulary. When children are in the second grade, they continue to expand their sight-word vocabulary and begin to develop skills in reading fluency. Accuracy and rapid reading are crucial skills at this level. In the third grade, students continue to develop their reading fluency and build their skills in reading comprehension. As children move through the fourth grade, they are refining and continually improving their developed fluency and comprehension skills (Snow et al., 1998).

Fluency is a crucial skill for readers. Most researchers agree that accuracy alone is not enough for students to understand what they are reading; they need to be able to read the material accurately and with relative speed (Nathan & Stanovich, 1991). The most beneficial way to improve fluency appears to be starting students with easier material and moving them through more difficult text (Lovitt & Hansen, 1976; Weinstein & Cook, 1992).

Numerous studies show that even after students have achieved competency in phonological awareness and sight-word recognition, they still require practice to build fluency (Chard et al., 2002). Skills in phonological awareness and sight-word recognition

are foundational for developing skills in reading fluency, just as fluency is necessary for students to comprehend the material they are reading. Fuchs et al. (2001) demonstrated the relationship between fluency and comprehension when they analyzed the results of several fluency interventions and demonstrated that strong fluency, particularly oral fluency can be predictive of comprehension ability. In addition, students who display difficulties in reading in mid to late elementary school (third and fourth grade) often struggle to read accurately or for comprehension, thus displaying poor fluency as well (Chard et al., 2002). Often in interventions designed to improve fluency, comprehension improves as well, as demonstrated by the synthesis of fluency interventions conducted by Chard et al. (2002). Students with significant reading difficulties often demonstrate a slow and hesitant style of reading. Fluency is particularly important for these students as this type of reading does not allow for students to gain comprehension of what they are reading as they are completely focused on decoding each word within the text.

Although research has clearly shown that oral reading fluency predicts reading accuracy and comprehension for monolingual students, there are mixed findings regarding the question of whether oral reading measures predict silent reading ability for children learning to read a second language (Gottardo et al., 2006; Miller et al., 2006; San Francisco et al., 2006). On the one hand, some research has found no relationship between oral reading fluency in L2 and other reading measures in L2 for bilingual students (Durgunoğlu, Nagy et al., 1993; Gottardo et al., 2001). One investigation, for example, administered students an oral reading proficiency test in L1 (Spanish) and L2 (English) and discovered that oral reading skills were uncorrelated with both word recognition (where students are asked to recite words in isolation, such as in a list or on

flash cards) and phonological awareness (the ability to understand the sound structure of a language; Durgunoğlu, Nagy et al., 1993; McBride-Chang, 1995; Wagner & Torgesen, 1987). Gottardo et al. (2001) also found no relationship between oral language proficiency and word decoding skills for children learning to read a second language.

While some research has failed to find a relationship between oral reading skills and overall reading ability in L2, several other studies reported a relationship between oral reading measures and other reading skills among bilingual students (Gottardo et al., 2006; Miller et al., 2006; San Francisco et al., 2006). Gottardo et al. (2006) used an 'oral cloze task' in Chinese. A cloze task includes passages with words missing. Children are responsible for filling in the blanks with contextually-fitting responses. Gottardo et al. (2006) found that the students' performance on the Chinese oral cloze task was related to their ability to read Chinese characters accurately. These results suggested that the children's oral language ability in L1 was related to their exposure to written Chinese and to the language structures associated with narratives in L1 (Gottardo et al., 2006).

In another investigation, oral reading measures in both L2 (English) and L1 (Spanish) were related to passage comprehension and word decoding skills (the ability to sound out a word) across grades (Miller et al., 2006). In direct contrast with other research findings (Durgunoğlu, Nagy et al., 1993; Gottardo et al., 2001), Miller et al. (2006) found that oral language was linked to performance in other reading skills (such as comprehension and their accuracy of word reading) in both L2 (English) and L1 (Spanish). To measure oral language, researchers read a story to the participants who were then asked to retell the story. These responses were recorded and then the complexity of their syntax, diversity of vocabulary, verbal fluency, and the ability to

create a coherent narrative were calculated (Miller et al., 2006). Similarly, San Francisco et al. (2006) also indicated that measures of oral language proved to be an important determinant of literacy skills. In this study, a measure of oral vocabulary in L1 (Spanish) predicted Spanish-influenced spelling, while this same measure in L2 (English) predicted ability in orthographically plausible English spelling. Each of these studies provides evidence that measures in oral reading are important in analyzing reading ability in children, particularly bilingual children (Gottardo et al., 2006; Miller et al., 2006; San Francisco et al., 2006).

Oral Reading Interventions

The similarities and differences in reading processes by bilingual, compared with monolingual, individuals are not yet fully understood. As reading researchers more clearly understand these reading processes, they will be better able to inform educators on interventions for improving bilingual children's acquisition of literacy skills in their adopted languages. It seems likely that in many cases, bilingual children's reading difficulties in L2 are due to the novelty of the new language, rather than to reading difficulties per se (Hus, 2001). In these instances, by implementing an individual or classroom intervention, students could be assisted in catching up to their peers and in ultimately becoming very successful readers in their adopted language.

Dufrene and Warzak (2007) examined the effectiveness of interventions designed to improve a student's oral reading fluency in both English (L2) and Spanish (L1). This study conducted a brief experimental analysis of reading fluency for Spanish and English reading, evaluated changes in instructional need over time For English reading, Listening Passage Preview (LPP) and Repeated Reading (RR) was associated with significant

improvement compared to baseline. This condition showed the most gains in words read correct and errors for both instructional and generalization passages compared to all the other treatment conditions. For Spanish reading, LPP showed the most performance gains compared to baseline during the initial brief experimental analysis. During the second brief experimental analysis, RR showed the most performance gains. Overall, more improvement was seen in reading achievement in English passages than Spanish passages. The research does show promise among the limited research using the instructional hierarchy in interventions for reading in a language besides English (Calhoon, Al Otaiba, Cihak, & King, 2007; Daly et al., 2005; Dufrene & Warzak, 2007). Many studies have demonstrated that systematic and explicit instruction in reading can improve the reading skills of both monolingual and bilingual students (Foorman, Fletcher, Francis, & Schaschneider, 1998; Gunn, Smolkowski & Ary, 2000; Hus, 2001; Kucer, 1992; Rousseau & Tam, 1991). These interventions can be done in many ways: classroom reading measures, tutoring sessions, and forms of supplemental reading instruction often given individually or in small groups (Foorman et al., 1998; Gunn et al., 2000; Hus, 2001; Kucer, 1992; Rousseau & Tam, 1991).

Several types of instructional approach have been developed to assist bilingual students in improving their reading skills (Denton, Anthony, Parker, & Hasbrouck, 2004; Foorman et al., 1998; Hus, 2001; Rousseau & Tam, 1991). Most commonly these include classroom reading interventions, tutoring, and supplemental reading instruction (Foorman et al., 1998; Denton et al., 2004; Gunn et al., 2000; Hus, 2001; Rousseau & Tam, 1991), but other intervention techniques also have been employed (Kucer, 1992). One teaching strategy used with bilingual students uses the cloze technique. In the cloze technique,

certain words or phrases are deleted from the text and children are asked to insert one or more words that fit the passage contextually. Cloze literacy lessons have been found to increase reading accuracy in bilingual students (Kucer, 1992).

A second approach is listening passage preview (LPP; Rousseau & Tam, 1991). This approach involves someone reading the passage aloud while the student silently follows along. Listening passage preview is sometimes combined with discussion of key words. By discussing key words, learners who may lack word-attack skills are able to practice the words before having to read them orally. The discussion of key words helps students to expand their vocabulary and to improve their comprehension by helping them use contextual information to understand the meaning of passages. One of the most important advantages of discussion, however, may be that it allows students to feel successful in an early stage of reading. In a study by Rousseau & Tam, 1991, the listening passage discussion (LPD) strategy resulted in a higher percentage of words read correctly than the students silently previewing key words (a method discussed in the next paragraph) or oral reading alone (baseline; Rousseau & Tam, 1991).

A third approach to increase reading fluency is silent preview of passages, where the child reads the passage to him- or herself prior to reading it aloud (Rousseau & Tam, 1991). This method is also sometimes paired with the discussion of key words from the passage.

Many researchers have evaluated different techniques to increase fluency for students using school-based interventions (Ardoin, McCall, & Klubnik, 2007; Begeny, Daly, & Valleley, 2006; Begeny & Martens, 2006; Chafouleas, Martens, Dobson, Weinstein, & Gardner et al., 2004; Daly, Bonfiglio, Mattson, Persampieri, Foreman-

Yates, 2006; Daly, Martens, Dool, & Hintze, 1998; Daly, Martens, Hamler, Dool, & Eckert, 1999; Daly, Martens, Kilmer, & Massie, 1996; Daly, Murdoch, Lillenstein, Webber & Lentz, 2002; Eckert, Ardoin, Daly, & Martens, 2002; Eckert, Dunn, & Ardoin, 2006; O'Shea, Munson, O'Shea, 1984; O'Shea et al., 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008). Reading fluency intervention instruction has been demonstrated to show more success not only in improving fluency, but also in improving reading comprehension, compared with classroom instruction alone (Kuhn & Stahl, 2003). Fluency interventions are often provided to struggling readers in addition to the instruction received in the classroom. However, comparisons among different types of fluency interventions have yet to clearly identify the best intervention method, especially for bilingual students. Overall, these interventions are effective in assisting readers in becoming fluent readers. These interventions seem to be the most beneficial for students between the late-primer and late second-grade level of reading (Kuhn & Stahl, 2003).

Repeated Reading Interventions

Despite the fact that students are often required to read silently both in the classroom and outside of the classroom, investigations have shown that oral reading results in more improvement than silent reading (NRP, 2000). Oral reading was shown to have a positive influence on many skills including word recognition, fluency, and comprehension, while silent reading alone was shown to be an ineffective intervention for improving reading fluency and other reading skills (NRP, 2000). Fuchs, Fuchs, Eaton, and Hamlett (2000) examined the relationship between oral reading, silent reading and comprehension. After reading a passage either silently or orally, students answered six questions pertaining to the text and also completed the Reading Comprehension section

of the Iowa Test of Basic Skills. Students who read orally performed significantly better than those who read silently (Fuchs et al., 2000).

One common intervention method used to increase oral reading fluency (ORF) is *repeated readings* (Chard et al., 2002; O'Shea et al., 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008). Repeated reading interventions require students to read more than one time during a session. Students read either the same passage over and over or they read different passages with each attempt (Vadasy & Sanders, 2008).

Repeated reading interventions have demonstrated improvement in fluency, accuracy, and comprehension for monolingual students with learning disabilities in reading (Chard et al., 2002; O'Shea et al., 1985). O'Shea et al. (1985) examined the effect of different amounts of repeated reading on fluency and comprehension. They also used attentional cues to examine if they affected comprehension and fluency. Attentional focus and the number of repeated readings were the two variables manipulated for this study. Participating students were assigned to one of two attentional focus groups. One group was cued to attend to their reading fluency, and the second group was cued to attend to their reading comprehension. In the fluency condition, a student would be given a verbal cue to read as quickly and accurately as they could. They would then read the passage either one, three, or seven times with a shortened verbal cue before each repeated reading. After they finished their readings, they were asked to tell the investigators what they could remember about the story. The comprehension condition was conducted similarly, however a cue was provided for the student to read for their best comprehension before each reading (O'Shea et al., 1985).

As hypothesized, students cued to read quickly and accurately read more words correctly per minute, while students cued to read for comprehension demonstrated recalled more propositions (O'Shea et al., 1985). Both the fluency and comprehension groups resulted in a higher reading rate as the number of readings increased. Comprehension rates also increased for both attentional focus groups as the number of readings increased from one reading to three. However, no additional benefit was found in comprehension for students who read the same passage more than three times. This study showed that students responded to external attentional cues, and that repeated reading and attentional cues increased both fluency and comprehension (O'Shea et al., 1985).

Vadasy and Sanders (2008) compared a repeated reading intervention that required students to read the same passage repeatedly with a control-group. The control group did not receive any intervention, but received classroom instruction only. The repeated readings treatment was designed to improve fluency and comprehension using six steps: letter/sound training, first passage reading, second and third passage reading, fourth passage reading, comprehension, and reading a new passage/rereading of a previous passage. Results demonstrated the relative effectiveness of the repeated-reading intervention for increasing the reading fluency of students with low fluency. However, the repeated reading intervention did not result in a significant increase in the comprehension skills of students relative to the control group (Vadasy & Sanders, 2008).

Wang and Algozzine (2008) also examined the effects of a repeated reading intervention. First graders who were at risk for reading failure were provided with an intensive intervention that aimed to increase phonemic awareness, alphabetic

understanding, decoding skills, and fluency. Results of the intervention group were compared to those of their peers who only received curriculum instruction in the classroom. While both groups demonstrated significant improvement over the school year, students who were a part of the intervention group showed significantly greater improvement (Wang & Algozzine, 2008).

Repeated reading and error correction and performance feedback. According to the instructional hierarchy (Haring & Eaton, 1978), a student must obtain accuracy in reading before they are able to read at a fluent rate successfully. Some students require intervention in accuracy before their fluency can be intervened on, while other times, interventions can be designed to address difficulties in both accuracy and fluency in the same intervention (Eckert, Dunn, & Ardoin, 2006; O'Shea, Munson, O'Shea, 1984). Research has shown that providing corrective feedback and the number of errors positively influences fluency (Lovitt & Hansen, 1976; Weinstein & Cook, 1992).

O'Shea et al. (1984) conducted a study to examine the different effects of error correction methods on reading fluency. The study examined the effect of three different corrective feedback procedures on the students' oral reading fluency: word supply, word drill, and phrase drill. Word supply involved providing the student with the correct word, having the student repeat it, and then letting them continue with the reading of the passage. For word drill, half of a student's error words were selected and were presented repeatedly on note cards until the student pronounced them correctly. Phrase drill requires the student read the phrase, which contains the error word repeatedly until they are able to pronounce them correctly. When students were presented with words in isolation, there were no significant differences in accuracy between word drill and phrase

drill, but when these words were placed within passages, phrase drill produced significantly more improvement in accuracy than word drill. No differences were seen in fluency between word drill and phrase drill procedures (O'Shea et al., 1984).

The purpose of the study by Eckert et al. (2006) was to examine a repeated reading intervention with two different types of performance feedback on the errors made. Students were either informed of how many words they had read correctly or how many words they had read incorrectly (errors), or they received no feedback at all. During each session the student read three different passages. If they were in one of the conditions were they received feedback, they were informed of their words correct or errors from the previous session. Their progress was graphed so that the students could visually see their progress. All participants showed improvement in words read correctly per minute (WCPM) when feedback was provided. Feedback on words read incorrectly was the most beneficial, however. Most participants also showed improvement in words read incorrectly per minute (WRIM) when some form of feedback was offered. Results were divided between participants who showed more improvement in words read incorrectly when provided feedback on words read correctly, when provided feedback on words read incorrectly, and showing no improvement at all on WRIM (Eckert et al., 2006).

Repeated reading with other various intervention components. Research examining oral reading fluency and repeated reading interventions has often compared or included other intervention components as well (Begeny et al., 2006; Begeny & Martens, 2006; Chafouleas et al., 2004; Daly et al., 1996; Daly, Murdoch, Lillenstein, Webber, & Lentz, 2002). These studies examined whether a student would benefit more from a

simple intervention such as repeated readings, or a more complex intervention featuring multiple components. These components may be forms of errors correction, types of reinforcers, modeling, or something else entirely.

Daly et al. (2005) examined the effects of an oral reading fluency (ORF) intervention with struggling readers who had been identified with a learning disability. First students' determined which passages were easy and which were hard through a prescreening. Then intervention was conducted to examine ORF on these easy and hard passages. Lastly, generalization was measured using high-content overlap (HCO) passages. During intervention, a reward was given if students beat a certain score in both fluency and accuracy. This phase consisted of listening passage preview, repeated readings, phrase drill, and a syllable segmentation and blending lesson. All participants showed improvement from control to treatment conditions in both difficulty levels. The differences were larger in harder passages compared to easier passages (Daly et al., 2005).

Begeny et al. (2006) compared a repeated readings intervention with an error correction intervention and a reward intervention. After baseline, the student received intervention in three different treatment conditions: repeated readings (RR), phrase-drill with error correction (PD) and reward (RE). The student read each passage twice before their words read correctly per minute (WRCM) was measured on the third reading in the repeated readings condition. Extra practice of the phrase featuring an error from the first reading was used during the PD condition. The student then read the passage over again to determine if the PD condition improved his WRCM and errors. In the RE condition, the student was offered a reward if he bettered his performance from the previous

passage. Results showed that both the repeated readings and phrase drill interventions demonstrated an increase in fluency over the baseline and reward conditions. The reward condition was only minimally effective over the baseline. The phrase drill condition resulted in the most improvement in accuracy (Begeny et al., 2006).

Daly et al. (2002) compared different individual intervention components as well as the combination of some of these components. Several conditions were used including repeated reading (RR), listening passage preview (LPP)/RR, easier materials (EM), EM/LPP/RR, phrase drill (PD), sequential modification (SM), word lists (WL), and contingent reward (CR). When an intervention uses LPP, the reading passage is first modeled for the student by the instructor. At least one condition was effective for each participant. One participant showed the most improvement in RR and LPP/RR over EM/LPP/RR and RR was used in the further analysis. The second participant showed the most improvement in the RR condition, which was used in further analysis. The third participant showed improvement in both LPP/RR and EM/LPP/RR, but LPP/RR was chosen for further analysis. The fourth participant's best performance was in EM/LPP/RR. For the last participant EM/LPP/RR was the most effective. Treatment packages showed significant effects for participants overall. Effect's on errors was not as significant. For most of the participants, adding rewards appeared to increase performance level and a small time period (Daly et al., 2002).

Begeny and Martens (2006) examined the effect of a group reading fluency intervention which incorporated several intervention components: repeated readings, practicing words in isolation, phrase drill, listening passage preview (LPP), comprehension (maze passages) and a reward component. The first stage of intervention

was training which involved practicing words in isolation from word lists and phrase drill. After students completed this training, the LPP component was conducted which included an instructor reading a passage while the students silently followed along. Repeated reading was implemented following LPP. Students earned points for on-task behaviors and lost points for off-task behaviors throughout the intervention stages, which could then be traded in for small rewards. Comprehension improved during intervention over baseline as measured by the maze procedure. Intervention increased WCPM significantly for both groups as students read more words correct during intervention than they did during baseline, and it also increased more during the second phase of treatment versus the first phase (Begeny & Martens, 2006).

Chafouleas et al. (2004) combined skill-based and performance-based fluency intervention components to examine the effects of their combined effort on participants' oral reading fluency. Skill-based interventions use antecedent teaching procedures. Examples of these interventions include modeling, drill, or practice. Performance-based interventions use the manipulation of consequences for fluent reading. These interventions often use some sort of reinforcement in the form of programmed contingencies, performance feedback, or a combination of both. This study included three treatment conditions; repeated reading (RR), repeated reading with feedback (RR/FB), and repeated reading with feedback and reinforcement (RR/FB/RW). All three conditions produced improvement over baseline for each of the participants. For two of the participants, the RR condition produced the greatest increase in fluency. RR/FB was the next successful, followed by RR/FB/RW. The third participant showed the most

improvement in the RR/FB condition followed by RR/FB/RW and then RR (Chafouleas et al., 2004).

A study by Eckert et al. (2002) examined whether adding contingent reinforcement and performance feedback to the antecedent intervention condition would produce higher fluency rates than baseline or the antecedent intervention alone. They were also examining how each participant would respond to the different conditions. After baseline, the first treatment condition was the antecedent intervention (AI). This condition involved LPP and RR procedures. All participants received this condition except one, who received only RR. As a participant in a previous study (Daly et al., 1999), this participant had demonstrated that more improvement was seen with fluency when only RR was used rather than LPP and RR (Eckert et al., 2002). After the AI condition, students received the antecedent intervention and contingent reinforcement (AI + CR). In this condition, students were offered a reward if they could increase their fluency rate by 5% in the last passage. The next treatment condition was the antecedent intervention and performance feedback (AI + PF). Prior to intervention, the instructor and student determined reading goals. The student was informed of their performance after each passage and the results were recorded. The last treatment condition was the antecedent intervention, performance feedback, and contingent reinforcement (AI + PF + CR), which incorporated the features of each of the previous conditions (Eckert et al., 2002).

The AI condition alone increased fluency for each participant. Four of the participants increased their fluency even more when one or both of CR and PF were added (Eckert et al., 2002). This study was successful in briefly analyzing contributions

to antecedent interventions and consequences. These results proved beneficial in identifying necessary reading intervention components. Results suggested that for some struggling readers, antecedent interventions LPP and RR may be sufficient to improve fluency. Also, no students increased beyond their current fluency rates when both consequences were combined, demonstrating the more components is not always better (Eckert et al., 2002).

In summary, it appears that repeated readings with modeling (when the word or passage is read to the student by the instructor, often before the student reads the passage independently) may be more effective than repeated reading with no modeling (Rose & Beattie, 1986; Smith, 1979). Although the reasons why repeated readings are effective are not yet well understood (Kuhn & Stahl, 2003), it is known that achievement in reading improves with an increasing amount of opportunities to practice (Anderson, Wilson & Fielding, 1988; Taylor, Frye, & Maruyama, 1990). Therefore improvements in fluency that are seen with repeated readings may be a result of additional practice rather than to repetition of the same material per se (Rashotte & Torgesen, 1985). Also in accordance with the information-processing model, it has been proposed that the beneficial effect of repeated readings on comprehension may be attributable to the improvements in automaticity that result from better fluency in that tasks that are automatic make fewer demands on memory (LaBerge & Samuels, 1974; Samuels, 1979, 1988)

Oral Reading Fluency Intervention for Bilingual Students

Calhoon et al. (2007) examined the effects of peer assisted learning strategies (PALS), a peer mediated reading skill acquisition program on ELL students. DIBELS

administration was conducted before the program began (the Fall), in the Winter, and then after the program was completed (Spring). Letter naming fluency (LNF), nonsense word fluency (NWF), and phoneme segmentation fluency (PSF) were the DIBELS subtests completed with each student. Oral reading fluency (ORF) was also assessed in each student at these times. PALS is a peer-mediation program where each student performs the role of coach and student, however the higher performing of the two is always the coach first. Each session, the teacher would present a model of the lesson and activity for the day. The pairs would then practice this activity for about 15 minutes while the teacher helped as needed. The students then participated in Story Sharing, a partner reading activity, for about 15 minutes. Story Sharing consisted of the partners previewing books, making predictions, taking turns reading and then retelling the story. ELL students in the PALS intervention condition were not significantly different from ELL control students prior to the beginning of the study. However, results favored the ELL students in the PALS program, especially on NWF and LNF. A moderate effect was also seen with ORF and a small effect was seen with PSF. Overall, PALS did not result in a significant increase in the participating ELL students ORF (Calhoon et al., 2007).

One study completed with ELL students in middle school failed to produce significant improvement in the participants reading fluency or any other reading skill (Denton et al., 2008). The intervention in this study was a modified version of a phonics-based remedial program, which includes ESL practices, vocabulary instruction, fluency, and comprehension strategies. Pre and post assessments were given in reading fluency, comprehension, word identification, and spelling. Results showed only a small improvement in reading skill in both the treatment and control groups, with no significant

differences between the two groups. These results indicated that this particular intervention was not beneficial to these middle school ELL students (Denton et al., 2008).

Oral Reading Fluency and Comprehension

Results from numerous analyzed studies show that students still require practice to build fluency, even after they have achieved competency in phonological awareness and sight-word recognition (Chard et al., 2002). Skill in phonological awareness and sight-word recognition is then related to skill in reading fluency. Similarly, fluency is considered to be a crucial skill in order for students to develop the ability to comprehend the material they are reading. Fuchs et al. (2001) demonstrated the relationship between fluency and comprehension when they analyzed the results of several fluency interventions. In addition, students who often display difficulties in reading in mid to late elementary schools (third and fourth grade) often struggle to read accurately or for comprehension, thus displaying poor fluency as well (Chard et al., 2002). Often in interventions designed to improve fluency, comprehension improves as well, as demonstrated by the synthesis of fluency interventions conducted by Chard et al. (2002). Students with significant reading difficulties often demonstrate a slow and hesitant style of reading. Fluency is particularly important for these students as this type of reading does not allow for students to gain comprehension of what they are reading as they are completely focused on decoding each word within the text. Fluency has been shown to be a key component in developing comprehension, particularly in elementary school and the early development of reading skill (Yovanoff, Duesbery, Alonzo, & Tindal, 2005). As a child's reading skill improves, fluency becomes less important

How is Comprehension Affected?

Comprehension is the ability for a reader to understand and recall text that they have read, whether orally or silently. Comprehension is an important part of reading development (Snow et al., 1998) and is often developed after fluency has been mastered (Chard et al., 2002; Fuchs et al., 2001). This skill can be measured using several different methods. Some examples include cloze tasks, where key words are removed from a passage and replaced with multiple words. The student must choose which word fits in the story. Another comprehension measure is norm-referenced tests, which are often administered in groups and require the students to read silently and then answer questions about the text (Klingner, 2004). Informal reading inventories require the student to answer two types of questions about a passage: those which can be answered with facts from the passage and those which require the student to hypothesize about what may happen or what the main character(s) might like. Retelling requires the student to restate as much of the text as they can. Interviews and questionnaires require the student to answer questions directly about the text they have read. These questions can be multiple choice, short answer, or even simple who, what, where, when, and why questions (Klingner, 2004). Researchers have begun to study the relationship between comprehension and an ELL's L1 and L2 (Sparks et al., 2008; Swanson et al., 2006; Wang et al., 2006).

A study by Wang et al. (2006) was among the first to examine the cross-language morphological transfer in learning two languages simultaneously. The smallest unit that can be associated with grammatical functions and meaning in any language is a morpheme. Morphological awareness is a child's ability to understand the "morphemic

structure of words and their ability to reflect on and manipulate that structure" (Carlisle, 1995, p. 194). Comprehension was measured, together with morphological and phonological awareness, word-reading, and oral language proficiency in both Chinese (L1) and English (L2; Wang et al., 2006). English (L2) reading comprehension was measured using four paragraphs from the Reading subset of the Wide Range Achievement Test-Expanded Edition (WRAT-E; Robertson, 2001). Children were instructed to read the paragraphs and then answer multiple-choice questions referring to the passages. Comprehension in Chinese (L1) was measured by translating the sentence comprehension subtest of the WRAT-E as well as translating three paragraphs and multiple-choice questions from the same subtest used to assess comprehension in English (L2). Results indicated that English comprehension was correlated with age, English grade level, English oral vocabulary, English phoneme deletion, English compound and derivational morphological awareness, and Chinese reading comprehension. Chinese reading comprehension was correlated with age, Chinese grade level, Chinese and English compound and derivational morphology, English oral vocabulary, English word reading, English reading comprehension, and Chinese character reading. After controlling for age, grade significantly contributed to Chinese reading comprehension, but not English reading comprehension, suggesting that in these students, learning has more impact on L1 than L2 after considering age. The skill of English compound morphological skill also contributed to Chinese reading comprehension beyond age, Chinese grade level, Chinese vocabulary, and English phoneme deletion (Wang et al., 2006).

Findings by Sparks et al. (2008) suggested that the earlier children are exposed to a language, before instruction in reading skills, the stronger their comprehension skills. Sparks et al. followed students from first grade through their second year of foreign language instruction in high school to examine the effects of L1 reading skills on later L2 reading skills. L1 reading comprehension was the best predictor of L2 reading comprehension, however L1 reading comprehension and other measured reading skills did not account for all of the variance in L2 reading comprehension. Sparks et al. (2008) speculated that this may have been because with L1 education, students begin with oral vocabulary and then gradually increase in difficulty of grammatical knowledge and overall reading skill. When students begin L2 instruction at a later age, such as high school, they are attempting to learn all of these skills at once, which may explain why some students seem to have difficulties developing reading comprehension skills in L2 even when they are strong in L1 reading skills (Sparks et al., 2008).

Comprehension Interventions with Bilinguals

Comprehension is important to measure as it ensures that the reader understands what he or she reads, not just understands how to decode the words. Measuring comprehension with ELL students is also important for these reasons. Several studies have examined the effects of intervention on comprehension (Fung et al., 2003; Kolić-Vehovec & Bajšanski 2007; O'Donnell et al., 2003).

Kolić-Vehovec and Bajšanski (2007) tested two hypotheses: (1) that comprehension monitoring and other meta-cognitive behaviors would be important for higher elementary school reading comprehension in bilinguals, and (2) that improvement in comprehension monitoring and meta-cognitive awareness of reading strategies is

important. Comprehension monitoring describes the process in which a reader checks their comprehension as they are reading. In this study, the participants were fifth through eighth grade students whose L1 was Croatian and their L2 was Italian. Kolić-Vehovec and Bajšanski (2007) measured the participants' reading comprehension with a 750-word passage followed by 11 open-ended questions. Comprehension monitoring was measured using the Metacomprehension Test (Pazzaglia, De Beni & Cristane, 1994) which assessed error correction and text sensitivity. A cloze test was also used to measure comprehension monitoring (Kolić-Vehovec & Bajšanski 2007). Results from a regression analysis revealed that grade, perceived language proficiency, as well as both measures of comprehension monitoring were significant predictors of reading comprehension; however age of L2 acquisition was not a significant predictor and perceived use of reading strategies did not significantly contribute beyond the effects of the other components. Results revealed that reading comprehension and monitoring may develop at an intensive rate in the late elementary grades (Kolić-Vehovec & Bajšanski 2007).

O'Donnell et al. (2003) conducted two experiments to determine if combining listening passage preview and discussion of key words would increase the participants' oral reading fluency and reading comprehension (O'Donnell et al., 2003). The participant in this study was a fifth grade boy. Chinese was his first language (L1) and English was his second (L2). The total words correct read by the student, the number of errors, and the number of correct answers to five comprehension questions served as the dependent variables. An ABAB reversal design was used in the first experiment. After baseline, intervention sessions began with the examiner and student discussed the topic of the story and any key words that may be important to the story or that the student may have

difficulty with. Next, the examiner read the passage while the student followed. The student then read the story himself and answered the comprehension questions immediately after. Retention was measured approximately six months after intervention was completed. Intervention demonstrated an increase over words read correctly and comprehension questions answered correctly as he performed higher during intervention sessions and would return to similar levels when baseline was re-implemented. Experiment 1 was extended to determine if the intervention would continue to have an effect over a six-month period. Experiment 2 was conducted on the same student and in the same format as Experiment 1. It began two weeks after the maintenance period was concluded and the purpose was to attempt to repeat the finding from the first experiment and continue the research through the following school year. Once again an increase was demonstrated with words read correctly and the number of comprehension questions answered correctly during the intervention sessions (O'Donnell et al., 2003).

Fung et al. (2003) determined the effectiveness of an L1-assisted reciprocal teaching strategy for improving LEP students' comprehension of English expository text. The reciprocal teaching strategy uses small group discussions to teach comprehension and monitoring strategies. The strategies are taught through four activities: questioning, summarizing, clarifying, and predicting. This strategy is initially teacher led, but over time, the students led discussions. Participants were Taiwanese immigrants who spoke Mandarin (L1) and read Chinese at grade level while they were learning English (L2). Fung et al. (2003) used a multiple baseline design across three groups of participants. After baseline, students received explicit instruction on concepts and strategies for comprehension and reading. Fung et al. (2003) used several measures to evaluate each

student's comprehension level and the process they used to comprehend when reading: the Neale Analysis of Reading Ability (Neale, 1988), administered pre- and post-intervention; daily comprehension tests; and a thinking-aloud procedure, which asked the students about prior knowledge of a topic and asked them to describe what they knew as they read. Results demonstrated that most students improved significantly on their comprehension skills from baseline to intervention and that this progress was maintained weeks later. Students also demonstrated using a larger number of distinct comprehension strategies from pre- to post-test (Fung et al., 2003).

Although research on improving reading fluency and comprehension in bilingual students is increasing, many questions still exist, particularly regarding comprehension. Repeated readings is a common intervention, not only with monolingual students, but with bilingual readers as well (Chard et al., 2002; Daly et al., 2005; O'Shea et al., 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008). Students seem to benefit from the extra practice this intervention provides. Much of the existing research on this type of intervention with bilingual students seems to focus on using repeated reading interventions with additional components added in such as error correction or modeling (Daly et al., 2005). Research examining comprehension in bilingual students has used various measures of comprehension, but has not examined how measures of fluency impact comprehension (Fung et al., 2003; Kolić-Vehovec & Bajšanski 2007; O'Donnell et al., 2003). Repeated Reading interventions have been shown to increase comprehension (Chard et al., 2002; O'Shea et al., 1985), but it is less clear how this intervention, particularly without additional components, impacts comprehension with bilingual readers.

What is the Future Direction for Research?

As the amount of diversity in American classroom increases, developing effective intervention techniques for diverse students grows in importance (U.S. Department of Education, 2004). Bilingual students, especially those who begin their schooling in the U.S. at older ages, will need assistance catching up to their peers who have been speaking English their whole lives (U.S. Department of Education, 2004). It is especially important to develop improved intervention techniques to help eliminate the disproportionately high special education rates that are found among bilingual children (Hus, 2001).

To date, the most promising method for eliminating this bias in special education representation by ELL students is Response to Intervention (Esparza Brown & Sanford, 2011; Klingner & Edwards, 2006; Vaughn & Fuchs, 2003). This tiered approach to screening, intervening, and progress monitoring can be used to identify students whose reading performance can be raised with additional intensive instruction, and to distinguish them from other students whose performance is likely to remain low even with additional intervention. Further research is still needed to identify the most effective techniques for assessing and intervening with bilingual children to consistently increase their reading skills, however research has made a few suggestions (Esparza Brown & Sanford, 2011). Many of the tools used to assess and progress monitor monolingual students can also be used with ELL students. Strong reliability and validity is important in methods used with ELL students. The most effective RTI assessment and monitoring methods will evaluate L1 and L2 (Esparza Brown & Sanford, 2011). Few studies have

examined oral reading fluency interventions on bilingual individuals, particularly by using methods found effective with monolingual students (Denton et al., 2008).

The present study administered certain components of oral reading fluency research commonly used with monolingual students to examine if they were also effective with bilingual students. A repeated readings intervention was also used to increase fluency. Also, as it is particularly important to ensure that bilingual students understand what they read, rather than that they merely learn to decode English words, a comprehension measure was used to evaluate this skill. It was hypothesized that the repeated readings intervention, often effective with monolingual students, would also increase the fluency and comprehension of bilingual students.

Research Questions

1. Will use of the repeated reading intervention increase English language oral reading fluency for the participating ELL students?
2. Will use of the repeated reading intervention increase English language reading comprehension for the participating ELL students?

Research Hypotheses

1. Use of the repeated reading intervention will increase English language oral reading fluency for the participating ELL students.
2. Use of the repeated reading intervention will increase the English language reading comprehension of the participating ELL students.

CHAPTER III

METHODS

Participants

Students were drawn from one public elementary school in Stillwater, Oklahoma during the 2009-2010 school year. The Stillwater school district contained six elementary schools that together served approximately 2,900 students. In addition to the six elementary schools, the district also included a middle school, a junior high, a high school, and an alternative high school. During the 2009-2010 academic year 41.6% of students in the Stillwater school district qualified for free or reduced-price lunch. A total of 228 students received English Language Learner (ELL) services. In 2009-2010 the total enrollment of the Stillwater school district was 5,650 students. Approximately three-fourths of the student population was White (77%). The remaining students were of the following ethnicities: Black, not Hispanic (7%), American Indian/Alaskan Native (7%), Hispanic (4%), Asian (5%), and Pacific Islander (0%).

The elementary school from which the participants in this study were drawn served students in Kindergarten through fifth grade. In 2009-2010 the total enrollment at this school was 494 students (259 male and 235 females). Approximately two-thirds of the student population at the school was White (62.35%). The remaining students were of the following ethnicities: American Indian/Alaskan Native (7.69%); Asian (11.54%);

Black, not Hispanic (9.51%); and Hispanic (8.91%). Approximately 72% of the student at the participating school qualified for a free or reduced-price lunch. A total of 83students qualified to receive ELL services. ELL services were provided by one ELL teacher, who was assisted in the ELL classroom by a second certified teacher. Although the second teacher was a certified teacher, her role in the ELL classroom was as a teacher's assistant. The ELL teacher provided instruction to each of the students who qualified for ELL services daily by grade level through pullout services. Pullout services were the only type of services provided for ELL students at this school at the time of this study, although the amount of services received could vary depending on the need of the student. Students received instruction and help, particularly in reading in English. As there was only one ELL teacher and a variety of first languages spoken, L1 services could not be provided to every student, but the ELL teacher did often know at least some phrases in each child's home language, enough to communicate or write short messages home to the parents. The ELL teacher was fluent in Spanish and the second teacher was also fluent in Arabic.

Classification as an English Language Learner. Students in this school district qualified for English Language Learner services based on their score on the Assessing Comprehension and Communication in English State-to-State for English Language Learners test (ACCESS; WIDA, 2007). The ACCESS was administered each spring to determine which students qualified as ELL students for the subsequent school year. The ACCESS is a standardized test designed to assess a student's academic English language proficiency. Children scoring at or below 4.4 in literature and at or below 4.9 on the composite score were classified as qualifying for ELL services. In the elementary schools at this district, students who met exit criteria continued to be monitored for two years.

Selection Criteria

Students were selected for inclusion in this study based on two basic criteria. The student needed to qualify for ELL services based on their ACCESS scores and they needed to be at least one grade level below their classroom grade level on the DIBELS reading assessment. The participants' ACCESS scores from the Spring of 2009 where used to determine eligibility for this study. This information is presented in Table 1. Unfortunately, data on participants' length in the US, education before coming to the U.S., and other background details not presented in Table 1, where unavailable.

Table 1.
Demographic data for participants

Name	Gender	Age	Ethnicity	First Language (L1)	Grade	ACCESS Scores (Spring 2009)	ACCESS Scores (Spring 2010)
Andrei	Male	9	Caucasian	Russian	3	1.1	2.8
Michael	Male	9	Hispanic	Spanish	3	3.5	3.9
Rita	Female	11	Arab	Arabic	5	3.6	4.6

Evaluation of baseline reading level. Participants were screened using the Dynamic Indicators of Basic Early Literacy Skills, 6th Edition (DIBELS; Good, Gruba, & Kaminski, 2002) to assess their oral reading accuracy, and fluency in English. DIBELS is designed for students to be evaluated at grade level three times a year (fall, winter, and spring). Each assessment is called a benchmark. These benchmarks are given so that a teacher or school is able to measure a student's progress over the course of an entire school year in reading. When evaluating what level a student is reading at, these benchmark passages can be given in order to compare their reading level with the DIBELS norms at that grade level and the three benchmarks of each grade level. When

measuring oral reading fluency, students read aloud three passages at a given grade level for one minute. For each passage the number of words per minute was computed as a measure of oral reading fluency. The number of errors per minute was calculated to determine oral reading accuracy. Median accuracy on the three passages at each level was used to determine the level of difficulty of the readings for each child. The difficulty of a reading passage for a particular student was classified as either at risk, some risk, or low risk, in accordance with the classification scheme and norms developed by DIBELS (Good, Gruba, & Kaminski, 2002). Based on the initial assessment results reported in Table 2, Michael and Andrei (both third grade students) were assigned second grade reading material. Rita, a fifth grade student, was assigned fourth grade reading material.

Table 2. *Participants' initial reading assessment performance*

Reading Level	Median WCPM	Median Errors	Performance Level (Based on WCPM)
Andrei			
Grade 1 (Benchmark 3)	56	5	Low Risk
Grade 2 (Benchmark 1)	42	3	Some Risk
Grade 2 (Benchmark 2)	53	4	Some Risk
Grade 2 (Benchmark 3)	50	5	At Risk
Michael			
Grade 2 (Benchmark 2)	70	1	Low Risk
Grade 2 (Benchmark 3)	67	2	At Risk
Rita			
Grade 3 (Benchmark 2)	109	1	Low Risk
Grade 3 (Benchmark 3)	100	2	Some Risk
Grade 4 (Benchmark 1)	73	3	Some Risk
Grade 4 (Benchmark 2)	80	4	At Risk
Grade 4 (Benchmark 3)	93	4	At Risk

Note. WCPM = Number of words read aloud correctly per minute.

The participating children were identified for study participation by the ELL teacher at their elementary school. The ELL teacher referred students who she thought would benefit from extra help in reading. Each student was screened using DIBELS benchmark measures (Good, Gruba, & Kaminski, 2002). The three children selected for participation in this study were all children at the school identified by their ELL teacher who met the selection criteria and from whom informed consent and assent were obtained.

Screening began in February 2009. At that time, only Andrei met the criteria for the study. Two additional students met the criteria for fluency, but they did not meet the criteria for accuracy. The students received a brief sight word intervention in an attempt to improve their accuracy, however when the two students were reassessed in March 2009 they had not made sufficient improvement in accuracy to meet the criteria for participation in the study. At this time, informed consent was received for Rita and Michael, who were assessed and found to meet entry criteria. Andrei was also reassessed to ensure that he still met study qualifications.

Instruments

Prior to initiating this study, full approval for the current project was granted by the Oklahoma State University Institutional Review Board. A copy of the approval form is provided in Appendix M.

Informed Consent Form. The researchers obtained informed consent from the participants' guardians before screening began. Potential study participants initially were identified based on referrals by the school's English Language Learner teacher. The informed consent forms contained details of the current study and provided an option for

the parent to sign allowing for the child to participate or to not participate. The informed consent form can be found in Appendix D.

Informed Assent Form. Informed assent was gathered from each participant after consent was granted from his or her parent or guardian, but before the researchers began screening. The informed assent forms contained details of the current study and provided an option for the child to participate in the study. The assent form can be found in Appendix E.

Student's Score Chart. Each student's folder contained a chart that was completed during or after the intervention session. Their daily scores were recorded on this chart in order of the researcher to be able to recorder the student's performance. An example of a performance chart can be found in Appendix F.

Reading fluency. Oral reading progress-monitoring materials from the Dynamic Indicators of Basic Early Literacy Skills, Sixth Edition (DIBELS; Good, Kaminski, & Dill, 2007) were used to measure and increase the students' oral reading fluency. Progress monitoring passages are grade-level normed like benchmark passages, but they allow for a student's reading to be evaluated in between benchmark periods. Researchers were trained in how to score fluency and how to implement the specific intervention used in the intervention. An example DIBELS fluency passage can be seen in Appendix G.

Reading comprehension. Maze passages were taken from AIMSweb (Pearson, 2010) system of curriculum-based measurement, a progress monitoring system based on direct and frequent student assessment. The participants' school used AIMSweb three times each year to benchmark their students in reading, writing, and math. The AIMSweb Maze passages consist of a total of 150 to 400 words. The first sentence in the passage is

intact, but beginning with the second sentence, every seventh word is replaced with a group of three words enclosed in parentheses.

The Maze passages used for this study were taken from the AIMSweb passages at each student's instructional level in oral reading fluency. As described above, based on the initial assessment results described in Table 2, Michael and Andrei were assigned second grade Maze passages, while Rita was assigned fourth grade Maze passages. Each student read each passage silently and was told to identify which of the three words best fits in the sentence. Students were allowed three minutes to complete as much of the task as they could. An example of an AIMSweb Maze passage is reproduced in the Appendix H.

The integrity of intervention implementation was measured using both self-report and independent observation.

Self-report. A written checklist was constructed that specified the required components to be carried out in each intervention session. Immediately following each session the interventionist placed a checkmark next to each component that was completed on the list. Appendix I is the checklist originally designed for this study. Appendices J-M were the checklists used when modifications were made in order to try and see some improvement in fluency see scores after the initial interventions produced no results.

Independent observation. All intervention sessions were audiotaped. At least 50% of intervention sessions were randomly selected and their audiotapes coded by trained graduate student observers blind to the experimental conditions and the results of the initial assessment. The observers received training in the proper intervention

procedures, including how to code errors and document the total correct words read. These observers were assessed for their accuracy and reliability in their scoring. The blind observers checked that sessions reliably followed the designed procedures and to verify student fluency and reading comprehension. Treatment integrity was calculated by dividing the number of treatment steps performed by the total number of treatment steps and multiplying this total by 100%. Inter-rater agreement was calculated as the total number of agreements divided by the agreements plus the disagreements. This total was multiplied by 100%.

Procedure

Baseline. Baseline performance was assessed for each participant's fluency and accuracy by having the student complete one DIBELS oral reading fluency passage during each baseline session. The student read each passage aloud for one minute with no feedback. The experimenter calculated the number of words read aloud correctly per minute (WCPM) and the number of errors for each passage. Each participant's reading comprehension was assessed by having him or her complete one Maze passage during each baseline session.

Repeated Readings. The repeated reading intervention was commenced following the baseline phase. The repeated reading procedure involved four steps. In Step 1, the *Maintenance Read*, the student read aloud a familiar passage that she or he had read in a previous session. In Step 2, the *Cold Read*, the student read aloud a new, unfamiliar passage one time. In Step 3, the *Practice Reads*, the participant read the Cold Read passage aloud three times to build fluency. Finally, in Step 4, the *Hot Read*, the participating student re-read the same passage that she or he read in Steps 2 and 3 a final

time. These four steps were carried out sequentially in every intervention session. They are described in further detail below.

At the beginning of each session (the Maintenance Read), the student read aloud the same passage that she or he had read aloud in Step 2 of the session immediately preceding the current session. The student read this passage aloud for one minute, and the experimenter measured the student's WCPM and errors. The purpose of the Maintenance Read was to allow the investigator to assess the degree to which the student maintained any gains from the previous session.

In the Cold Read, the student read aloud a new, unfamiliar passage of the same reading level as the Maintenance Read. The student read aloud for one minute, and WCPM and number of errors were calculated. If a student asked for help with a word, or if he or she was unable to pronounce a word within three seconds, the experimenter provided the student with the correct word. Otherwise, no error correction or feedback was provided in this step.

During the Practice Reads, the student was informed that she or he would complete three practice readings of the same passage the student read in the Cold Read, in order to practice the passage. The student read the passage aloud for one minute, allowing for the number of WCPM and errors to be calculated. If the student asked for help with a word or was unable to produce the word within three seconds, he or she was provided with the correct word. Also, the experimenter provided feedback by correcting all words that the student pronounced incorrectly immediately after each pronunciation error, regardless of whether or not the student requested feedback.

In the final read (Hot Read), the participant was told that this was his or her last reading of the passage and urged to see how far he or she could read in one minute. As in the Cold Read, the participant was provided with a word if he or she asked for help or was unable to produce it within three seconds. The experimenter computed WCPM and errors.

Subsequent Intervention Modifications

One student (Andrei; one of the third grade students) was moved into intervention after four baseline sessions. The second student (Michael; the second third grade student) was moved into the intervention phase after 10 baseline sessions. The final student (Rita; the fifth grade student) was moved into the intervention phase after 14 baseline sessions. Each student's baseline performance is graphically depicted in Figure 1.

After beginning the intervention phase, both Andrei and Michael showed an increase in fluency in both trend and level. However, both students soon stabilized and demonstrated no further improvement in their fluency. Rita performed at a stable level throughout the intervention phase, showing no sign of growth. Because no students showed improvement during the designed intervention stage, additional research-supported intervention elements were added in an attempt to identify an intervention that would improve each student's fluency.

Andrei. Andrei's intervention was subjected to two modifications. The first intervention modification added an error correction component, in which after each reading, the researcher reviewed his errors with him to ensure he had the correct pronunciation. The Error Correction component provided feedback to the student after the Cold Read and the three practice reads. Each error made during a reading would be

practiced at least three times. The second modification added a modeling component, in which the researcher read the story to him one time immediately after Andrei's first read. The Error Correction and Modeling phase provided the feedback just discussed, plus after the cold read the investigator would read a portion of the passage to the student. They would read approximately 1½ times what the student had read during the cold read. So if the student had read 60 WCPM, the investigator would read approximately 90 words.

Michael. Michael's intervention was subjected to one modification, consisting of the addition of a goal-setting component. Each day, Michael's score from the first read the day before was reviewed and he was shown approximately how far he needed to read on the new passage to beat that score. If he read more words on his first read than the day before, he received a small prize. For Michael, goal setting was added to the intervention. Prior to beginning the new passage, the student was told how many words he read correctly on his Cold Read the session before. He was told that if he beat his score from the day before, he would receive a prize.

Rita. Rita's intervention was subjected to one modification. The same error correction component was added that was used with Andrei. After each reading, the researcher reviewed Rita's errors with her to ensure she had the correct pronunciation.

Return to Baseline

Immediately after the completion of the interventions, the students completed three additional sessions, in which they performed the same read-aloud and Maze procedures they did at baseline. At least three data points were collected for each participant in this phase.

Experimental Design

A multiple baseline across subjects design was used for this study. Students received the intervention approximately five times per week for seven weeks. Each intervention session lasted approximately 15 minutes. After the first three baseline points, the trend of each student's performance was evaluated. If a student had stable or declining fluency scores he or she could be moved to the intervention phase while the remaining students would stay in the baseline phase. Once the student in intervention began to show a stable upward trend of at least three data points, another student was moved into intervention. The student with the most stable baseline was moved to intervention at this time.

Analysis

The students' performances during each intervention session were recorded. These scores were graphed and visually analyzed to determine if the intervention had any effect on their reading fluency or comprehension levels. The graphs were visually analyzed in three ways: trend, level, and variability. The goal for the study was for the intervention to create an upward trend in the students' reading scores, such that the students' reading fluency scores would increase over time. If there was such a trend, and the slope was significant, the intervention could be called a success. Another goal of the study was to increase the student's reading level such that the students' were reading a higher number of words per minute by the end of the study than they were in the beginning. If this change in level occurred and the rate of improvement was more than was typically seen in children learning to read, the intervention would be a success. The final way to visually analyze the student's performance would be to examine the variability in their scores. The more variability in a student's scores, the less certain a

researcher can be regarding their true ability level, so if the student has little variability, the researcher can be certain of their level of improvement, trend, or lack thereof.

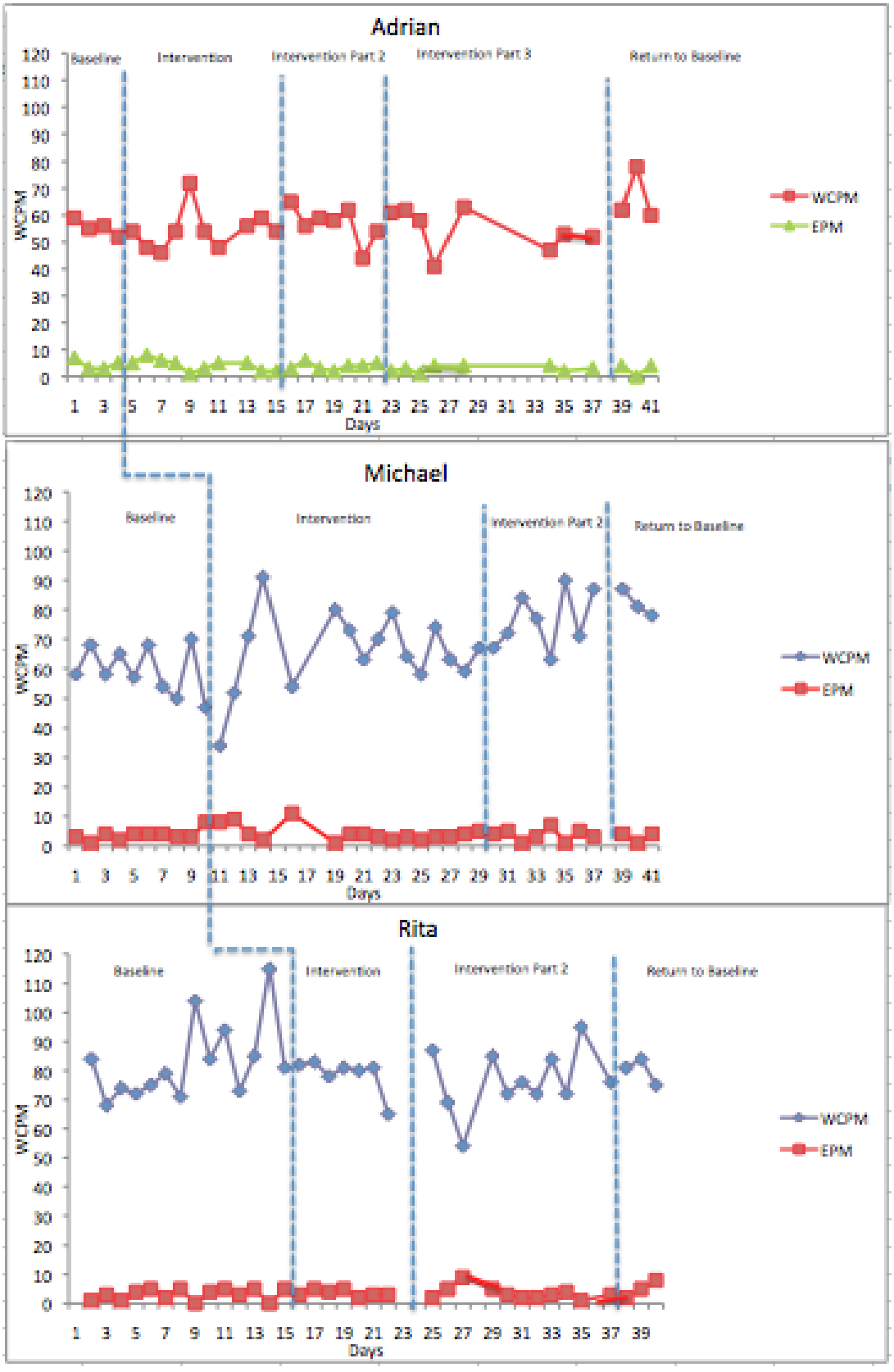
CHAPTER IV

RESULTS

Research Question #1: Will use of the repeated reading intervention increase English language oral reading fluency for the participating ELL students?

As Figure 1 shows, none of the three participants showed significant growth in their reading fluency during the repeated reading intervention, nor during any of the modifications that were made to their treatments. None of the students showed a significant change in performance with the addition of these elements. The slope of the line for the intervention performance for each student was calculated. Andrei's fluency performance slightly decreased over the course of the intervention (b=-0.0331). Rita's fluency performance also slightly decreased (b=-0.0619). Michael's fluency performance was the only one to increase, although not significantly (b=0.79). Intervention performance can be seen in Figure 1.

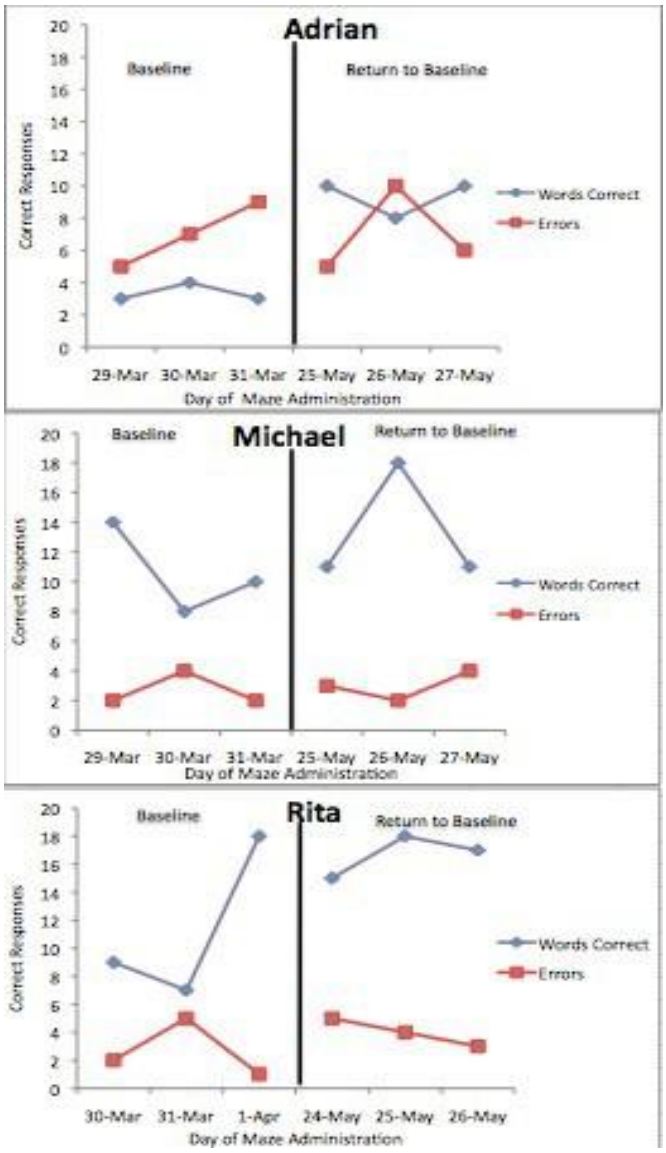
Figure 1


Adrian
Baseline
Intervention
Intervention Part 2
Intervention Part 3
Return to Baseline
WCPM
EPM
Days
Michael
Baseline
Intervention
Intervention Part 2
Return to Baseline
WCPM
EPM
Days
Rita
Baseline
Intervention
Intervention Part 2
Return to Baseline
WCPM
EPM
Days

Research Question #2: Will use of the repeated reading intervention increase English language reading comprehension for the participating ELL students?

Figure 2 shows the comprehension performance of the participating students, as measured by the Maze procedure.

Figure 2



As Figure 2 shows, for two of the students, Michael and Rita, the repeated reading intervention was not effective in improving their reading comprehension in English, as

measured by the Maze passages. Andrei, however, did show slight improvement in comprehension, despite not showing improvement in fluency even after alterations were made to the intervention. These results should be interpreted with caution. Although Andrei's correct answers increased, he still had a high number of errors.

As the students did not show significant growth during the intervention phase, it was not surprising that very little to no change was seen between the first baseline phase and the return to baseline phase. Due to the lack of growth during intervention, the post-treatment Maintenance sessions that had been planned for this study were not carried out, as there was no growth to maintain. Each student's post-intervention performance can be seen in Figures 1 and 2.

Intervention modifications. Because no students showed improvement during the designed intervention stage, additional intervention elements were added in an attempt to find an intervention that would improve each student's fluency. As Figure 1 shows, Andrei's fluency scores in response to Intervention 1 were stable with little to no improvement, and errors were a concern. In order to improve accuracy and fluency simultaneously, an error correction component was added to Andrei's intervention (Intervention 2). This addition to the repeated readings intervention did not increase Andrei's fluency or decrease his errors. His intervention was modified once more (Intervention 3), by adding a modeling component. No appreciable improvement was observed following this modification.

Michael's response to the repeated readings intervention resulted in substantial variability in fluency scores, suggesting that additional intervention components targeting Michael's motivation to perform might improve his fluency scores. Consequently,

additional components of goal setting and reward were added to Michael's intervention (Intervention 2). As shown in Figure 1, improvement initially was observed after this modification, but after several sessions, variability in Michael's fluency scores again increased. It is possible that given more time, Michael may have been able to improve his fluency with this intervention.

In response to the original repeated reading intervention, Rita's fluency scores, Like Andrei's, showed little to no improvement and she manifested a substantial frequency of errors (see Figure 1). For this reason, Rita's modification consisted of the addition of an error correction component to the original intervention (Intervention 2). After this change, the variability in Rita's reading fluency was observed to increase, with no overall increase in fluency performance.

Procedural treatment integrity and inter-rater agreement was calculated on over 50% of the intervention sessions. Between the three students, 104 sessions were conducted (Andrei-32, Michael-37, and Rita-35). In total, 53 sessions were reviewed for treatment integrity and inter-rater agreement (Andrei-16, Michael-19, and Rita-18). Procedural treatment integrity was calculated overall and for each individual participant. Overall, treatment integrity was 97.75%. Similar percentages were seen for each participant as well: Andrei (97.47%), Michael (96.97%), and Rita (97.75%). Inter-rater agreement was also calculated overall and for each individual participant. Slight discrepancies were seen among raters, resulting in an overall inter-rater agreement level of 10.40%. The inter-rater agreement was slightly higher when the number of words read aloud correctly or the number of errors made were examined separately. The inter-rater agreement for the number of words read aloud correctly was 15.84%. It was 36.63% for

the number of errors made. These scores were configured for each individual participant as well: Andrei (overall-13.75%, words correct-15%, and errors-43.75%), Michael (overall-7.59%, words correct 15.19%, and errors-30.39%), and Rita (overall-9.30%, words correct-18.60%, and errors-34.88%).

The inter-rater agreement was also calculated allowing for slight discrepancies between the two raters. When $\pm$ 1 word and $\pm$1 error difference was allowed the inter-rater agreement was: overall-40.64%, Adrian-38.37%, Michael-35.00%, and Rita-52.83%. When $\pm$ 2 words and 2 errors difference was allowed the inter-rater agreement was: overall-57.53%, Adrian-54.65%, Michael-56.25%, and Rita-64.15%. When $\pm$ 3 words and 3 errors difference was allowed the inter-rater agreement was: overall-67.12%, Adrian-66.28%, Michael-62.5%, and Rita-75.47%. When $\pm$ 4 words and 4 errors difference was allowed the inter-rater agreement was: overall-74.43%, Adrian-75.58%, Michael-68.75%, and Rita-81.13%. When $\pm$ 5 words and 5 errors difference was allowed the inter-rater agreement was: overall-80.37%, Adrian-82.56%, Michael-75%, and Rita-84.91%.

CHAPTER V

DISCUSSION

The purpose of this study was to determine the effectiveness of a basic repeated readings intervention for increasing the reading fluency and comprehension of elementary-aged English Language Learners. Repeated readings is a commonly used empirically supported intervention for monolingual English speaking students. Its effectiveness with ELL population is less clear. While other researchers have targeted fluency in ELL students (Calhoon et al., 2007; Denton et al., 2008), neither of these studies had success improving the fluency of ELL students. No known prior research has examined the effectiveness of repeated readings with ELL readers.

Research Question #1: Will use of the repeated reading intervention increase English language oral reading fluency for the participating ELL students?

None of the three participants showed significant growth in their reading fluency during the intervention. The repeated reading intervention did not increase the English language oral reading fluency for the participating ELL students. As no students showed improvement during the designed intervention stage, additional intervention elements were added in an attempt to find an intervention that would improve each student's fluency. Unfortunately, none of these modifications were successful.

While none of the participants made significant growth in their fluency over the course of the intervention, some of the participants did make growth when their baseline performance was compared to their return-to-baseline performance. The median of their baseline scores was compared to the median of their return-to-baseline scores. At baseline, Andrei's fluency was 55.5 WCPM. He improved by approximately 6.5 WCPM as his median at return to baseline was 62.5. Michael improved the most at approximately 23 WCPM. At baseline his median was 58 WCPM and at return to baseline it was 81 WCPM. Rita showed the least amount of growth at just approximately 1 WCPM. Her median at baseline was 80 WCPM and at return to baseline it was 81 WCPM. It is hypothesized that this intervention would have been successful in improving each student's fluency given more time, especially Michael's.

O'Shea et al. (1984) examined the effects of three different corrective feedback procedures on the students' oral reading fluency: word supply, word drill, and phrase drill with varying degrees of success. Their word supply technique was similar to the technique used during practice reads of the present study and was also ineffective in enhancing the fluency of monolingual readers. Yet the results of the present study differ from those reported in repeated readings research studies with monolingual students (Begeny et al., 2006; Begeny & Martens, 2006; Chafouleas et al., 2004; Chard et al., 2002; Daly et al., 2002, 2005; Eckert et al., 2006; O'Shea et al., 1985; Vadasy & Sanders, 2008; Wang & Algozzine, 2008). Chard et al. (2002) and O'Shea et al. (1985), for example, both demonstrated improvement in fluency, accuracy, and comprehension for monolingual students with learning disabilities in reading when using repeated readings interventions, while focusing on the effects of attentional cues on reading performance.

Vadasy and Sanders (2008) also showed success with monolingual students. Their intervention was similar to the current study except that it trained students in letter/sound correspondence before the students began the reading portion of the intervention. Although their intervention resulted in increases in reading fluency, it did not demonstrate a significant increase in comprehension (Vadasy & Sanders, 2008). Wang and Algozzine (2008) also featured intervention components aiming to increase fluency and phonemic awareness, alphabetic understanding, and decoding skills (Wang & Algozzine, 2008).

Eckert et al. (2006) examined a repeated reading intervention with various types of performance feedback on errors: (1) how many words had been read correctly, (2) how many words had been read incorrectly (errors), or (3) no feedback. Feedback proved beneficial, particularly to participants who received feedback on errors (Eckert et al., 2006). The original intervention developed for the current study did not inform the participants of their errors. However, after the lack of improvement was observed following implementation of the intervention as originally planned, error feedback was included in intervention modifications for Rita and Andrei. However, although these students were informed of how many errors they had made in their Cold Read, and subsequently practiced correcting their errors, their fluency scores did not increase. It is difficult to explain this difference between the present study and Eckert et al. (2006).

Daly et al. (2005) combined a repeated readings intervention with several additional intervention components to enhance reading fluency in monolingual students with learning disabilities. The intervention used easy and hard passages and included listening passage preview, repeated reading, phrase drill, and a syllable segmentation and

blending lesson, and also a reward for beating a score in both fluency and accuracy. Daly et al. (2005) reported improvement in all participants, with greater improvement observed on harder reading passages. In light of Daly et al.'s (2005) results, the present study incorporated a reinforcement component for Michael in Intervention 2; unlike Daly et al., (2005), however, reinforcement failed to increase Michael's reading fluency.

Begeny et al. (2006) compared the effectiveness of a repeated readings intervention with an error correction intervention and a reward intervention for monolingual readers. The student received intervention in three different treatment conditions: repeated readings, phrase-drill with error correction, and reward. All three conditions increased fluency, but the phrase drill with error correction and repeated readings were the most effective (Begeny et al., 2006). The present study employed error correction, but did not include phrase drill. It is possible that had phrase drill been added, the present intervention may have resulted in fluency growth.

Daly et al. (2002) compared different individual intervention components as well as the combination of some of these components. Several conditions were used including repeated reading, listening passage preview, easier materials, phrase drill, sequential modification, word lists, and contingent reward. Fluency was increased in all participants, but the components or combinations of components that were most effective varied across participants. Results suggested that individual differences in students would recommend a brief analysis to determine which components would be most effective when beginning an intervention. This study differed from the current study as it sampled several different conditions with each participant briefly to see how they affected the

participant's fluency, rather than using one condition and then building on that condition when it proved ineffective.

Begeny and Martens (2006) examined the effect of a group reading fluency intervention that incorporated several intervention components: repeated readings, practicing words in isolation, phrase drill, listening passage preview, comprehension (maze passages) and a reward component. Participants began the intervention by practicing words with list and phrase drill, they then completed and listening passage preview phrase, followed by a repeated readings phrase. They earned the opportunity for rewards throughout and completed Maze throughout to monitor comprehension. In contrast with the present study, fluency and comprehension both increased in this study with monolingual students (Begeny and Martens, 2006).

Chafouleas et al. (2004) combined skill-based (modeling, drill, or practice) and performance-based (rewards, or performance feedback) fluency intervention components to examine the effects of their combined effort on participants' oral reading fluency. This study included three treatment conditions; repeated reading, repeated reading with feedback, and repeated reading with feedback and reinforcement. All three conditions produced improvement over baseline for each of the participants. For two of the participants the repeated readings condition was the most effective.

Eckert et al. (2002) studied contingent reinforcement and performance feedback. The first treatment condition included listening passage preview and repeated readings. The second treatment condition added contingent reinforcement, in which students were offered a reward if they could increase their fluency rate by 5% in the last passage. The next treatment condition was the listening passage preview and repeated readings, plus

performance feedback. The last treatment condition was a combination of them all. The first treatment condition alone increased fluency in the monolingual participants in this study. Several of the participants increased their fluency even more when one or both of contingent reinforcement and performance feedback were added (Eckert et al., 2002). Similar components were added to the current study when the basic repeated readings interventions proved unsuccessful. A component called goal setting was used with Michael. At the beginning of each session, his performance from the day before was discussed and a reward was offered if he was able to beat his score. After he read, his performance was reviewed. Initially, error correction was added to Andrei's intervention. When he still struggled to increase his fluency, modeling was also added. This component is similar to listening passage preview in that the student listens to the researcher model the passage and follows along with them. The difference was the Andrei had a chance to read the story before it was modeled, however, he was still not able to show an increase in his fluency scores.

Research Question #2: Will use of the repeated reading intervention increase English language reading comprehension for the participating ELL students?

Reading comprehension was measured using Maze passages. For two of the students, Michael and Rita, the repeated reading intervention was not effective in improving either their fluency or their comprehension in English. Andrei, however, did show slight improvement in comprehension, despite not showing improvement in fluency even after alterations were made to the intervention. These results should be interpreted

with caution. Although Andrei's correct answers increased, he still had a high number of errors.

Comprehension did not significantly increase, but for some of the participants, Maze correct responses did increase. Median scores between the first 3 Maze and the second 3 Maze tasks were compared. Andrei's median at baseline was 3 correct responses, but at return to baseline it was 10 correct responses. Rita's median at baseline was 9 correct responses, but at return to baseline it was 17 correct responses. Michael did not improve much as he was at a median of 10 correct responses at baseline and improved to a median of 11 correct responses at return to baseline. He had higher scores, but they were not consistent enough to raise his medians. It is unclear why some of the students displayed these increases in Maze scores, especially as the two students who did so, struggled the most on fluency. Perhaps just having the extra reading practice assisted them.

Vadasy and Sanders (2008) also used a repeated readings intervention with monolingual students. While increasing fluency, they did not improve comprehension. The methods of their intervention were slightly different as they measured comprehension by asking five comprehension questions each intervention session (Vadasy and Sanders 2008).

In their intervention with a 10-year-old fifth grade language-minority student, O'Donnell, Weber, and McLaughlin (2003) were successful in improving both reading comprehension and fluency. Six months after the completion of the intervention, data was collected for three days to see if the student had maintained his growth in fluency and comprehension, which he had. The researchers even completed the study a second time,

beginning two weeks after the maintenance period, with the same student to see if similar results could be produced. The second intervention period also increased the student's fluency and comprehension as measured by the questions asked. O'Donnell et al. (2003) discussed key words in the story and previewed the passage prior to the student attempting to read each passage. In the present study, similar components were included in the modifications for two participants (Andrei and Rita). Similar to O'Donnell et al.'s (2003) practice of reviewing key words, we included reviewing errors and providing definitions of unfamiliar words, and similar to O'Donnell et al.'s (2003) practice of previewing the passage, we also included a modeling component for Andrei. Although Andrei's correct responses on the Maze increased from pre- to –post intervention, he was unable to improve upon his errors. It is possible one of these components helped Andrei improve his overall score on the Maze.

Fung et al. (2003) also were successful in increasing the English reading comprehension of bilingual students in grades 6 and 7. In contrast to the methods used in the present study, Fung et al. (2003) used native language-assisted reciprocal teaching. This means that while the intervention was in English, there were also components in the students' native language as well. Comprehension was measured by a pre- and post-test as well as 10 daily questions during the intervention. Pre- and post-intervention, the students also participated in think aloud tasks, in which they were allowed to think aloud while they were reading in their native language, even when reading in English, as researchers believed it would provide a better picture of their comprehension. Finally they completed a generalization task, which were expository texts, or stories that contained logical inconsistencies in both their native language and English and the

student was asked to identify these inconsistencies. In comparison to the present study, students in this study demonstrated significant growth in comprehension and maintained that growth weeks later. They also demonstrated an increased number of comprehension skills from pre- to post- test (Fung et al., 2003).

Implications

This study demonstrated that a repeated readings intervention with no additional components was not able to significantly improve the reading fluency or comprehension of three elementary school ELL children. Additional components were added, designed to best help the students find success during the intervention sessions. Neither Andrei nor Rita displayed changes in their fluency despite these changes. In the present study, Michael did not show a change in his fluency level, however, given more time, the goal-setting stage may have allowed him to begin to achieve the expected growth.

Strengths

One strength of this investigation was that it was carried out in a natural setting. Students were selected by their ESL and classroom teachers and pulled from their classrooms for participation in the study.

This study also employed an intervention with strong empirical support (for native speakers of English) and applied it to an understudied demographic: ELLs. This is especially important in light of the increasing cultural diversity of the U.S. and the increasing number of ELLs in American schools. It is also important because response to intervention (RTI) with ELLs is an important area for future research, and the educational interventions used in RTI are required to have empirical support for the populations with which they are used (Chard et al., 2002; O'Shea et al., 1985; Vadasy & Sanders, 2008;

Wang & Algozzine, 2008). The use of RTI and empirically supported interventions can now be used to identify students for special education, especially under specific learning disability. In some states, schools must use RTI and interventions in order to diagnose a student with a specific learning disability. In order for schools to provide ELL students with the appropriate special education services, more research needs to be completed to ensure that the same reading interventions which are successful for the native English speaking students are also successful for the ELL population.

Treatment integrity was high (97.75%). This means that on the observed audio recordings, the researchers followed the protocols established and that the participants received nearly the same intervention on a daily basis. Treatment integrity was high with individual participants as well: Andrei (97. 47%), Michael (96. 97%), and Rita (100%).

Limitations

This study has several limitations. The frequency of intervention implementation varied slightly for each student. Working within a school, there are certain components that cannot be controlled, such as absences, field trips, testing, etc.

First language skills may have impacted each student's ability to learn to read in English (Collier & Thomas, 1989; Crockett & Brown, 2009; Cummins, 1979). For example, if any students who had not developed proficiency in their first language it may take have required more time to become proficient in English. If they struggled to read in their first language, they may have had a learning disability and would thus struggle to learn to read in English as well. Proficiency in each student's first language was unavailable due to each student's first language being different and access to resources in each of these languages.

Reading different material during each intervention session eliminated any practice effects. However, a student may demonstrate more variability when they read different material each session. Taking the median of three cold reads on three different passages and the median of three Maze passages would have eliminated some of this variability.

Another limitation pertains to the low rates of inter-rater agreement obtained in the study. Despite training the raters, one of the raters who completed the inter-rater agreement assessments consistently measured the total number of words read aloud and the number of errors a great deal higher than the other rater. We hypothesize that despite having been instructed to count only the words read in one minute, this rater instead continued to count the words each student read aloud to the end of each passage. Unfortunately, this discrepancy in inter-rater measures was not noticed in time to address this issue with the raters while they were assisting with the study. A second possible explanation for the lower than desired inter-rater agreement rates pertains to the rather large size of the research team. The utilization of six different research assistants to administer the intervention each week also may have inflated the likelihood of differences in how the assessments were scored.

Directions for Future Research

Much more research on the effects of different reading interventions with ELL populations is still needed. Repeated readings is a common interventions used with monolingual English speakers, but the results are inconclusive when working with ELL populations and the results of this study suggest that a repeated readings intervention alone may not be enough to improve the fluency of these students. One directions of

future research is to compare the effects of a repeated readings intervention alone with the effects of repeated reading interventions with various additional components such as error correction, modeling, and goal setting. Is one component more effective than others? Is a combination best?

Research also needs to focus on the impact of several different individual factors within each ELL student. Comparisons of the effects of repeated readings interventions are needed on how much exposure to English the student has had. Also, how does their proficiency in their first language impact the effectiveness of such interventions? Do children with certain L1's respond better than others? Finally, does the age of the student matter? Is a repeated readings intervention more effective on a student in elementary school than one in middle school or high school? If they are a high school student, how does the amount of time they have been exposed to English impact the effects of the intervention?

Another focus for future research is the impact on a student's level of language acquisition on the success of empirically supported interventions with ELL students. It is important to understand a student's language skill in both English and their native language as both can significantly impact their ability to read and perform academically in English (Collier & Thomas, 1989; Crockett & Brown, 2009; Cummins, 1979). Wang et al. (2006) demonstrated that comprehension could be improved in ELL students when instruction is given in both their native language and a second language. Research supports continuing native language instruction whenever possible (Collier & Thomas, 1989; Crockett & Brown, 2009; Cummins, 1979). Sparks et al. (2008) suggests that the earlier children are exposed to a language, before instruction in the skills of reading, the

stronger their comprehension skills may be. It is important to understand more about how a student's BICS and CALP affect their English reading ability. The participants in this study may not have had a strong enough foundation in English language skills, and thus were not ready at a level were they could succeed at a repeated readings intervention. If participants had been screened prior to the intervention to determine their BICS skills, perhaps the results would have been more significant. As discussed by August & Shanahan (2006), it is important to teach more than just the basic reading skills to ELL students. Research needs to focus on how to help students develop their BICS skills. August & Shanahan (2006) also discussed that those students who do not develop their BICS skills prior to beginning instruction in CALP skills are often able to perform with their English-speaking peers on basic skills such, but are below level on the more advanced skills.

Future research should conduct a similar experiment as was conducted in this study but control for some of the variability that likely occurred due to the reading of one passage, which differed each day. The student could read three different passages at the beginning of the intervention session, with the median used as the cold read score for the day. The student could then receive additional practice on one of the three passages. Having the student complete three Maze passages each time during the baseline and return to baseline assessments would remove variability on that measure as well. Finally, more research is needed on the impact of fluency-based interventions on ELL students' comprehension levels. Is improving fluency enough to improve comprehension as well or are additional comprehension components needed?

This research adds to existing research on reading interventions with ELL populations. The results of this study provide evidence that having a student read material multiple times for one minute many not be enough to significantly improve their fluency. When the repeated readings intervention failed to improve the students' fluency, error correction, modeling, or goal setting were added to the intervention. These components also failed to improve the students' fluency. More research is needed to better understand if this intervention was unsuccessful with this sample, but would be successful with many other ELL students, or whether a repeated readings intervention would not be an ideal interventions for this population.

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APPPENDIX A

DIBELS Oral Reading Fluency Norms (Words Correct per Minute) as Developed by Good, Gruba, & Kaminski (2002)

	Fall Benchmark	Winter Benchmark	Spring Benchmark
1st Grade	Not Administered	Low Risk – 20 and above Some Risk – 8-19 At Risk – 0-7	Low Risk – 40 and above Some Risk – 20-39 At Risk – 0-19
2nd Grade	Low Risk – 44 and above Some Risk – 26-43 At Risk – 0-25	Low Risk – 68 and above Some Risk – 52-67 At Risk – 0-51	Low Risk – 90 and above Some Risk – 70-89 At Risk – 0-69
3rd Grade	Low Risk – 77 and above Some Risk – 53-76 At Risk – 0-52	Low Risk – 92 and above Some Risk – 67-91 At Risk – 0-66	Low Risk – 110 and above Some Risk – 80-109 At Risk – 0-79
4th Grade	Low Risk – 93 and above Some Risk – 71-92 At Risk – 0-70	Low Risk – 105 and above Some Risk – 83-104 At Risk – 0-82	Low Risk – 118 and above Some Risk – 96-117 At Risk – 0-95
5th Grade	Low Risk – 104 and above Some Risk – 81-103 At Risk – 0-80	Low Risk – 115 and above Some Risk – 94-114 At Risk – 0-93	Low Risk – 124 and above Some Risk – 103-123 At Risk – 0-102
6th Grade	Low Risk – 109 and above Some Risk – 83-108 At Risk – 0-82	Low Risk – 120 and above Some Risk – 99-119 At Risk – 0-98	Low Risk – 125 and above Some Risk – 104-124 At Risk – 0-103

APPPENDIX B

DIBELS Norm s Table for Second and Third Grade

DIBELS Data System

DIBELS Benchmark Goals
Three Assessment Periods Per Year

SECOND GRADE	Beginning of Year Month 1 - 3		Middle of Year Month 4 - 6		End of Year Month 7 - 10	
DIBELS Measure	**Scores**	**Status**	**Scores**	**Status**	**Scores**	**Status**
Nonsense Word Fluency (NWF-CLS)	0 - 29 30 - 49 50 and above	Deficit Emerging Established	Not administered during this assessment period		Not administered during this assessment period	
Oral Reading Fluency (ORF)	0 - 25 26 - 43 44 and above	At risk Some risk Low risk	0 - 51 52 - 67 68 and above	At risk Some risk Low risk	0 - 69 70 - 89 90 and above	At risk Some risk Low risk
Retell Fluency (RTF) [1]	BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED. [1]					
Word Use Fluency (WUF) [2]	BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED. [2]					

THIRD GRADE	Beginning of Year Month 1 - 3		Middle of Year Month 4 - 6		End of Year Month 7 - 10	
DIBELS Measure	**Scores**	**Status**	**Scores**	**Status**	**Scores**	**Status**
Oral Reading Fluency (ORF)	0 - 52 53 - 76 77 and above	At risk Some risk Low risk	0 - 66 67 - 91 92 and above	At risk Some risk Low risk	0 - 79 80 - 109 110 and above	At risk Some risk Low risk
Retell Fluency (RTF) [1]	BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED. [1]					
Word Use Fluency (WUF) [2]	BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED. [2]					

APPPENDIX C

DIBELS Norms Table for Fourth Grade

DIBELS Data System

DIBELS Benchmark Goals
Three Assessment Periods Per Year

FOURTH GRADE	Beginning of Year Month 1 - 3		Middle of Year Month 4 - 6		End of Year Month 7 - 10	
DIBELS Measure	**Scores**	**Status**	**Scores**	**Status**	**Scores**	**Status**
DIBELS Oral Reading Fluency (ORF)	0 - 70	At risk	0 - 82	At risk	0 - 95	At risk
	71 - 92	Some risk	83 - 104	Some risk	96 - 117	Some risk
	93 and above	Low risk	105 and above	Low risk	118 and above	Low risk
DIBELS Retell Fluency (RTF)	BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED.*					

APPENDIX D

Parent/Guardian Permission Form

Project: The Effectiveness of a Repeated Readings Intervention with English Language Learners

Investigators: Stephanie Hoveln, M.S. and Georgette Yetter, Ph.D., School of Applied Health and Educational Psychology at Oklahoma State University.

Purpose: The current research study is designed to better understand the kinds of reading interventions that are helpful to students whose primary language is not English, or who are English Language Learners. Your child is being asked to participate in this study because they qualify as an English Language Learner and to better improve their reading ability.

Procedures: We will assess the reading ability of participating students. This will be done by having the student read short passages to determine their reading level. They will read three short passages at each level. Students who are at least one reading level below their reading level will then be chosen to participate in the study. These students will then be provided with additional reading instruction outside the classroom on a daily basis for approximately two to three months. Students will be pulled from the classroom to a quiet and private location in the school such as an empty classroom or office. This instruction will last about 15-30 minutes each day, for approximately 2-3 months. The amount of time participating in the study will vary for each participant. This instruction will include a pre and post test of their reading level and an intensive reading intervention, which involves providing the student with reading practice through repetition of the same material each session. Students' comprehension level will also be evaluated at the beginning and end of the study. Measuring comprehension level will help ensure that their comprehension level did not decrease because of the provided intervention.

Risks of Participation: Participating in reading instruction is not known to pose any risks to your child greater than those ordinarily encountered in daily life.

Benefits: It is suspected that participation in the study will help improve your child's reading ability as well as provide useful information for possible future reading interventions for your child and other English Language Learners.

Confidentiality: The records for this study will be kept private. However, a summary of the results will be provided to the students' teachers. These results will include their beginning reading levels and ending reading levels. This information will be used to provide recommendations for future classroom instruction. Results of this study may be submitted for publication and written for presentations. Any written results will discuss group findings and will not include information that will identify your child. Names will be removed and replaced by code numbers on all documents. If names are needed when presenting results, fake names will be used. Your child's name will not be used with any data for publications or presentations. Research records will be stored securely for five years and only researchers and individuals responsible for research oversight will have access to the records. The consent process and data collection will be overseen by

research staff responsible for safeguarding the rights and wellbeing of people who participate in research.

Contacts: You may ask questions regarding this research and have these questions answered before agreeing to participate in the study. You may also ask questions during the study. You may call Stephanie Hoveln, telephone (405) 744 8044 or Dr. Georgette Yetter, telephone (405) 744-2445 at any time to discuss this research. If you have any questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

Participants' Rights: Participation in this study is voluntary. Your child may discontinue participation at any time without any reprisal or penalty.

Please check one box below and return to your student's classroom teacher. Thank you.

I have read and fully understand this information.

☐ **I DO Agree to allow my child to**

☐ **I DO NOT participate in this research study**.

_____

Your Childs Name (please print)

_____

Parent/Guardian Name (printed)

_____ _____

Signature of Parent/Guardian Date

APPENDIX E
Child Assent Form

We are going to work together to improve your reading. Each time we meet you will be asked to read a short story. Some days you will only have to read the story once, while other times we may read the story a few times. You do not have to work with me if you do not want to. Also, if you agree to work with me today, but decide later that you know longer want to work with me on your reading, you can quit without getting in any trouble from me, your teacher, or even your parents. I am going to ask you a few questions, right down your answers, and then ask you to sign your name if you are ok with working together.

What are we going to work on?

Do you have to work with me?

If you want, can you quit at any time?

Do you agree to work with me on your reading?

_____

Child's Name (printed)

_____ _____

Child's Signature Date

APPENDIX F

Reading Intervention

Date	Maintenance Read	1st Read	2nd Read	3rd Read	4th Read	5th Read

ORF Progress Monitoring 1

A Present From Me

I wanted to take my stepmother out to dinner for her birthday 12
and pay for our dinner with my own money. I wanted it to be a 27
surprise and I wanted it to be just from me. The problem was, I 41
didn't have any money! 45

I went out to try to find ways to earn money. The lady who 59
lives in the apartment upstairs said she wanted to get rid of all 72
her empty soda cans and bottles. She said I could keep the 84
money for the deposit if I took all of the cans and bottles back to 99
the store. It took me five trips, but I got them all taken back to 114
the store. 116

The man in the apartment downstairs said I could walk his 127
dog after supper every night for two weeks. Our neighbor lady 138
said she could use some help putting out the trash and getting rid 151
of old newspapers. One lady in our building said she would like 163
some help with her groceries, but she couldn't afford to pay me. 175
I helped her anyway. She said she would give me some flowers 187
to give to my stepmother. 192

The day before her birthday I asked Mom if she would go on 205
a date with me for dinner. She was surprised when I paid for the 219
dinner with the money I had earned. She made me tell her where 232
I had gotten the money. Then she gave me a big hug and said it 247
was the best birthday present ever. I think she liked the flowers 259
the best of all. 263

Total words: _____ – errors: _____ = words correct: _____

APPENDIX H

AIMSweb Maze Passage

Becky didn't want to go to sleep. She tried as hard as she **(could, where, know)** to stay awake. She knew that **(I, the, if)** she fell asleep, she would miss **(wanted, seeing, thought)** Santa Claus. Becky thought that the **(long, weak, old)** man with whiskers was wonderful. In **(all, want, when)** her books, he appeared so jolly **(ask, and, but)** kind.

Some of the students in **(Becky's, Santa, where)** kindergarten class said that Santa was **(big, just, fell)** a fairy tale. Janie was one **(on, so, of)** Becky's friends. She was a sassy **(weeks, purple, little)** girl with red hair. She said **(that, want, and)** parents try to make kids believe **(go, in, of)** Santa so they behave. She thought **(Santa, Janie, long)** was a big trick.

Becky didn't **(stayed, grateful, believe)** Janie. Santa was a real person, **(of, so, and)** tonight she would see him again. **(One, She, Red)** had seen Santa Claus once when **(she, big, some)** was three. She sat on his **(fire, lap, that)** at the mall. Santa asked her **(how, what, when)** she wanted for Christmas, and Becky **(knew, she, had)** been too shy to say anything.

(On, As, Was) the way home, Becky's parents told **(hard, she, her)** not to worry. They said Santa **(pillow, could, knew)** look into your heart and know **(things, sounds, worry)**. It still bothered her a lot **(would, asked, though)**. She wished she had spoken to **(she, him, hard)**.

Tonight was Christmas Eve. Weeks ago, **(Becky, real, here)** had sent Santa a list of **(the, for, an)** presents she wanted. She and her **(mother, jolly, student)** had baked cookies for him this **(anything, listened, afternoon)**. They were placed on a big **(said, red, old)** and green plate right in front **(of, for, is)** the fireplace. Santa couldn't miss them. **(He'd, Kind, She)** be so grateful to have a **(snack, fire, hard)** after all his hard work.

Becky **(evening, believe, listened)** hard for the sounds of Santa **(parents, landing, person)** on the roof. She just knew **(she, if, too)** she stayed awake long enough she **(real, fell, would)** see him. Then she could tell **(the, at, deer)** other kids that he was real. **(Kind, She, Her)** head fell against the pillow, and **(he'd, she, on)** was fast asleep.

Becky didn't want
3P07

APPENDIX I

Repeated Readings Protocol

Materials needed:

Yesterday's passage (student and scored copies)
Today's passage (student and the blank scored copies)
Stop watch
Student's reading chart.
Pen (preferably not black)

Repeated Readings

___ 1. Maintenance Read: Sit with the student in a quiet place without too many distractions. Give them the passage they read yesterday. Say to them, **"Let's try to beat our score from yesterday, please read the passage."** Time them while recording any errors. Stop them after a minute. Count the words he read correctly for that minute and place total on the record sheet. (this is the maintenance point- to see how the fluency maintained over to the next day).

___ 2. 1st Read/Cold Read: Give them the next "new" passage to read. Say to them, **"This is the reading we will do today. Read as many words as you can. If you come to a word you don't know, I will tell it to you. Remember to sound out words you do not know, instead of guessing.**

a. If they are reading aloud and misread a word or hesitates for longer than 3 seconds, read the word aloud and have them repeat the word correctly before continuing through the passage. If they asks for help with any word, read the word aloud, have them read the word correctly, and continue reading. If they read a word incorrectly, allow them to continue reading, do not provide correction.
b. Allow them to read the passage, recording any errors or miscues they make during this "cold" read. Watch the stop watch and mark where they were at a minute. Record the student's words correct per minute and errors in the first column of their chart. BE SURE TO MARK WHERE THEY WERE AT A MINUTE

___ 3. 2nd Read/Practice: Now tell the student that **they are going to read the passage in order to practice**." Follow along with the student as they read and provide immediate error correction on words they miss. Mark the point they reached at one minute and record the score on their chart (correct words and errors), but allow them to finish the sentence. If they missed a word that they did not miss the first read, ensure that they can decode the word.

___ 4. 3rd & 4th Read/Practice: Repeat Step Two twice for a total of three practice reads.

___ 5. 6th Read/Hot Read: Say to the student, **"Now I am going to time you again. Begin."** Only provide words if the student struggles for 3 seconds or asks for help with a word. Stop them after a minute. Mark the point they reached and record the score (correct words and errors) on their chart.

APPENDIX J
Repeated Readings Protocol 2

Materials needed:
Yesterday's passage (student and scored copies)
Today's passage (student and the blank scored copies)
Stop watch
Student's reading chart.
Pen (preferably not black)

Repeated Readings

___ 1. Maintenance Read: Sit with the student in a quiet place without too many distractions. Give them the passage they read yesterday. Say to them, **"Let's try to beat our score from yesterday, please read the passage."** Time them while recording any errors. Stop them after a minute. Count the words he read correctly for that minute and place total on the record sheet. (this is the maintenance point- to see how the fluency maintained over to the next day).

___ 2. 1st Read/Cold Read: Give them the next "new" passage to read. Say to them, **"This is the reading we will do today. Read as many words as you can. If you come to a word you don't know, I will tell it to you. Remember to sound out words you do not know, instead of guessing.**

a. If they are reading aloud and misread a word or hesitates for longer than 3 seconds, read the word aloud and have them repeat the word correctly before continuing through the passage. If they asks for help with any word, read the word aloud, have them read the word correctly, and continue reading. If they read a word incorrectly, allow them to continue reading, do not provide correction.
b. Allow them to read the passage, recording any errors or miscues they make during this "cold" read. Watch the stop watch and mark where they were at a minute. Record the student's words correct per minute and errors in the first column of their chart. BE SURE TO MARK WHERE THEY WERE AT A MINUTE

___ 3. Error Correction: Now point to each error and have the student read that word to you. If he has trouble, sound out for him and allow him to put it together.

___ 4. 2nd Read/Practice: Now tell the student that **they are going to read the passage in order to practice**." Follow along with the student as they read and provide immediate error correction on words they miss. Mark the point they reached at one minute and record the score on their chart (correct words and errors), but allow them to finish the sentence. If they missed a word that they did not miss the first read, ensure that they can decode the word.

___ 5. 3rd & 4th Read/Practice: Repeat Step Two twice for a total of three practice reads.

___ 6. 6th Read/Hot Read: Say to the student, **"Now I am going to time you again. Begin."** Only provide words if the student struggles for 3 seconds or asks for help with a word. Stop them after a minute. Mark the point they reached and record the score (correct words and errors) on their chart.

APPENDIX K

Repeated Readings Protocol 3

Materials needed:

Yesterday's passage (student and scored copies)
Today's passage (student and the blank scored copies)
Stop watch
Student's reading chart.
Pen (preferably not black)

Repeated Readings

___ 1. Maintenance Read: Sit with the student in a quiet place without too many distractions. Give him the passage he read yesterday. Say to him, **"Let's try to beat our score from yesterday, please read the passage."** Time him while recording any errors. Stop him after a minute. Count the words he read correctly for that minute and place total on the record sheet. (this is the maintance point- to see how the fluency maintained over to the next day).

___ 2. 1st Read/Cold Read: Give him the next "new" passage in his readings to read. Say to him, **"This is the reading we will do today. Read as many words as you can. If you come to a word you don't know, I will tell it to you. Remember to sound out words you do not know, instead of guessing.**

a. If the he is reading aloud and misreads a word or hesitates for longer than 3 seconds, read the word aloud and have him repeat the word correctly before continuing through the passage. If he asks for help with any word, read the word aloud.
b. Allow the student to read the passage, recording any errors or miscues he makes during this "cold" read. Watch the stop watch and mark where he was at a minute. Record the student's words correct per minute and errors in the first column of his. BE SURE TO MARK WHERE HE WAS AT A MINUTE

___ 3. Error Correction: Now point to each error and have the student read that word to you. If he has trouble, sound out for him and allow him to put it together. Ensure the student understands the meaning of each error.

___ 4. Modeling: Say to the student**, "Now I want you to follow along as I read the passage."** Read about 150% as far as the student reached on their Cold Read. For example, if the student read 60 words correctly on the Cold Read, read approximately 90 words to them.

___ 5. 2nd Read/Practice: Now tell the student that **they are going to read the passage in order to practice**." Follow along with the student as they read and provide immediate error correction on words they miss. Mark the point they reached at one minute and record the score on their chart (correct words and errors), but allow them to finish the sentence. If they missed a word that they did not miss the first read, ensure that they can decode the word.

___ 6. 3rd & 4th Read/Practice: Repeat Step Two twice for a total of three practice reads.

___ 7. 5th Read/Hot Read: Say to the student, **"Now I am going to time you again. Begin."** Only provide words if the student struggles for 3 seconds or asks for help with a word. Stop them after a minute. Mark the point they reached and record the score (correct words and errors) on their chart.

APPENDIX L

Repeated Readings Protocol 4

Materials needed:

Yesterday's passage (student and scored copies)
Today's passage (student and the blank scored copies)
Stop watch
Student's reading chart.
Pen (preferably not black)

Repeated Readings

___ 1. Maintenance Read: Sit with the student in a quiet place without too many distractions. Give them the passage they read yesterday. Say to them, **"Let's try to beat our score from yesterday, please read the passage."** Time them while recording any errors. Stop them after a minute. Count the words he read correctly for that minute and place total on the record sheet. (this is the maintenance point- to see how the fluency maintained over to the next day).

___ 2. 1st Read/Cold Read: Give them the next "new" passage to read. Say to them, **"This is the reading we will do today. Read as many words as you can. If you come to a word you don't know, I will tell it to you. Remember to sound out words you do not know, instead of guessing. Yesterday you read XX words correctly. If you can read more words than XX you will earn prize." Show the student the minimum distance they must reach to meet this goal.**

a. If they are reading aloud and misread a word or hesitates for longer than 3 seconds, read the word aloud and have them repeat the word correctly before continuing through the passage. If they asks for help with any word, read the word aloud, have them read the word correctly, and continue reading. If they read a word incorrectly, allow them to continue reading, do not provide correction.
b. Allow them to read the passage, recording any errors or miscues they make during this "cold" read. Watch the stop watch and mark where they were at a minute. Record the student's words correct per minute and errors in the first column of their chart. If he earns a prize, allow him to pick a prize out of the box. BE SURE TO MARK WHERE THEY WERE AT A MINUTE

___ 3. 2nd Read/Practice: Now tell the student that **they are going to read the passage in order to practice**." Follow along with the student as they read and provide immediate error correction on words they miss. Mark the point they reached at one minute and record the score on their chart (correct words and errors), but allow them to finish the sentence. If they missed a word that they did not miss the first read, ensure that they can decode the word.

___ 4. 3rd & 4th Read/Practice: Repeat Step Two twice for a total of three practice reads.

___ 5. 6th Read/Hot Read: Say to the student, **"Now I am going to time you again. Begin."** Only provide words if the student struggles for 3 seconds or asks for help with a word. Stop them after a minute. Mark the point they reached and record the score (correct words and errors) on their chart.

APPENDIX M

IRB Approval

Oklahoma State University Institutional Review Board

Date:	Thursday, December 17, 2009
IRB Application No	ED09131
Proposal Title:	The Effectiveness of a Repeated Readings Intervention with English Language Learners
Reviewed and Processed as:	Expedited (Spec Pop)

Status Recommended by Reviewer(s): Approved Protocol Expires: 12/16/2010

Principal Investigator(s):

Stephanie Hoveln
443 Willard
Stillwater, OK 74078

Georgette Yetter
442 Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Shelia Kennison, Chair
Institutional Review Board

VITA Stephanie Nicole

Huff Candidate for the

Degree of Doctor of

Philosophy

Thesis: THE EFFECTIVENESS OF A REPEATED READINGS INTERVENTION WITH ENGLISH LANGUAGE LEARNERS

Major Field: School Psychology

Biographical:

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Completed the requirements for the Doctor of Philosophy in School Psychology at Oklahoma State University, Stillwater, Oklahoma in December, 2012.

Completed the requirements for the Master of Science in School Psychometrics at Oklahoma State University, Stillwater, Oklahoma in December, 2007.

Completed the requirements for the Bachelor of Arts in Psychology at Eastern Illinois University, Charleston, IL in May 2006.

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School Psychology Doctoral-Level Intern at Maine East High School in the Illinois School Psychology Internship Consortium
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Professional Memberships: NASP, APA, ISPA