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THE INFLUENCE OF SUMMER LITERACY PROGRAMS FOR IMPROVING READING SKILLS IN ELEMENTARY SCHOOL

Benita Rene' Keesler

THE INFLUENCE OF SUMMER LITERACY PROGRAMS FOR IMPROVING
READING SKILLS IN ELEMENTARY SCHOOL

A Field Study Proposal

Presented to

The College of Graduate Studies

Austin Peay State University

In Partial Fulfillment

Of the Requirements for the Degree of

Education Specialist

Benita Rene' Keesler

December 2013

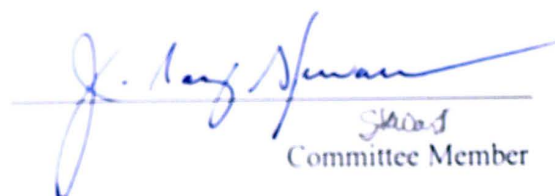
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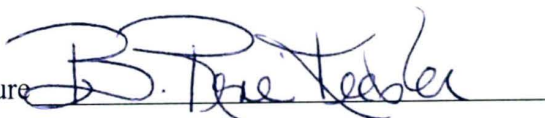
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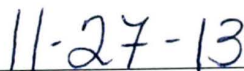
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DEDICATION

This field study is dedicated to my three wonderful children Dillon, Nicholas, and Sydney Keesler who have been my motivation and inspiration. Without their patience and encouragement, this would not have been possible. I love and cherish every moment we spend together. Each of you have inspired me to keep reaching for the stars and to never give up on my dreams. I pray that this journey together will be an experience you all will never forget and one you all will use as future reference and inspiration for your individual dreams. I am so grateful for your understanding during this long journey to further my education and dreams.

Dillon, you are my inspiration for moving forward, being patient and reminding me to enjoy the simple things in life. Your calm character reminds me to work through tough times carefully and to keep moving forward. Nicholas, you inspire me to work hard for the important things that mean the most. Your determination and persistence remind me to move forward no matter how hard things may seem to be. Sydney, you inspire me to stay focused on happiness and to stay joyful in all things in life. You remind me how exciting life can be by the way you are always living in the moment and not looking back in the past.

Thank you all for your support and love during this important transition of my life. Always remember anything is possible if you have the support and encouragement of your loved ones. Thank you for always being my inspiration.

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ABSTRACT

BENITA RENE' KEESLER. The Influence Of Summer Literacy Programs For Improving Reading Skills In Elementary School. Under the direction of Dr. B. Bruster.

This research study was conducted to evaluate the impact of Summer Literacy Programs measured by DIBELS. Many students decline in their reading skills over the summer and begin the school year at a level lower than the previous year. Students in summer programs make significant gains in reading skills and return to school with improved self-assurance and an interest for reading. Creating summer literacy programs within elementary schools is a common intervention used in many schools to help raise student achievement (Owen, Rousch, Muskin, Alexander & Wyant, 2008). Summer family literacy programs for young children can change the future of education, meaning that teacher not only educate the student but the family as well (Graham, McNamara, and Van Lankvied, 2010). This study hypothesized that there was a statistically significant difference in DIBELS scores before and after Summer Literacy Camp. This study analyzed DIBLES scores of 71 primary students in kindergarten, first, second, and third grade who attended four weeks of Summer Literacy Camp in 2012. Minitab Statistical Software was used to conduct *t*-tests for each of the participating grade levels. Analysis of variance, (ANOVA) was utilized using Minitab to test for statistical significance using sub-tests. Four null hypotheses were tested and analyzed at the .05 level of significance.

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CHAPTER I

Introduction

Statement of the Problem

Many students diminish in their reading skills over the summer and begin the school year at a level lower than the previous year. Students in summer programs make substantial gains in reading skills and return to school with increased confidence and a love for reading. Creating summer literacy programs within elementary schools is a common intervention used to help raise student achievement (Owen, Rousch, Muskin, Alexander & Wyant, 2008). Improving reading fluency is critical to students' overall academic success. Students need proper reading skills to avoid struggles and failures in school. Reading skills are needed to complete math solutions and to understand science and history materials, as well as everyday life skill situations. Students who do not have adequate reading skills most often struggle across the curriculum academically, face retention, or may not graduate from high school. These setbacks result in discouragement about attending college and following life-long dreams (Anderson, Wang & Gaffney, 2006). Research studies were conducted to determine strategies, programs, and techniques to improve and teach reading fluency to students across the world (Owen et al., 2008).

This silent epidemic spirals into a huge disadvantage for students causing them to become labeled as "at-risk." The term at-risk indicates a student who is more likely than others to fail academically based on circumstances that the student cannot change without proper intervention (Byrnes & Myers, 2010). The circumstances may focus on ethnic minorities, students who have learning disabilities, students who are characterized by low

socioeconomic status, and students with behavioral issues (McCombes & Spear, 2011). Educators often use test scores to identify students who show signs of struggling academically. This allows teachers to focus on the identified reading issues and provide helpful interventions to lower the possibilities of failure.

Learning to read is critical for becoming successful academically. Reading is the major foundation for school-based learning and vocational success. From kindergarten until third grade, students are learning to read. Beginning in fourth grade, students begin to read to learn. Students who are not reading on grade level by third grade begin falling behind based on fluency and comprehension skills needed to understand and relate to the written material (Lesnick, George, & Smithhgall, 2010). Approximately one-third of all students entering high school are reading two or more years below grade level, and one-half of the African American, Hispanic, and Native American students in public schools fail to graduate on time. The Organization for Economic Co-Operation and Development (2012) found that globally, the United States ranked 21st in high school graduation and 12th in college graduation rates among developed nations.

Students who read below grade level encounter many negative issues in school. Researchers have found that students who do not read on grade level often struggle with behavior problems in the classroom that often result in suspension and poor self-image (Lesnick, et al., 2010). Students who struggle to read often drop out of school and never graduate. The United States Department of Education estimated the unemployment rate of a high school dropout to be three times higher than that of a high school graduate or five times higher than that of a college graduate (Lesnick, et al., 2010). When students drop out of school, 35% of those dropouts are arrested within three to five years after

leaving school (Jerald, 2006). Reading skills are important to early elementary students, high school students, and college students. Without proper reading skills, students continue to struggle and fall behind in all aspects of life.

School districts are developing Response To Intervention (RTI) programs based on assessments where teachers continually monitor students' skills and progress. The RTI is an early detection process used with prevention strategies that identify struggling students and assists them before they fall behind (Griffin, 2008). Students' individual needs must be addressed to help them achieve academic success and help map the specific instructional strategies found to benefit the students' needs. The process requires several assessment screenings by highly qualified teachers (Griffin, 2008). Dynamic Indicators of Basic Early Literacy Skills (DIBELS) is one assessment used by many districts. This series of tests can be helpful in identifying reading deficiency and constructing a proper Response to Intervention model for the students' individual needs. When the data is presented, it gives the educator an awareness of the individual progress of the student and allows them to create a plan of action for the student (Griffin, 2008). Often programs such as summer literacy and after school tutoring programs are used to provide extra support for these students.

Purpose of the Study

The purpose of this research study was to determine the effects the Summer Literacy Camp has on student reading skills. The students identified for this study are at risk in one or more areas of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS is a series of testing procedures that uses criterion-referenced target scores to measure the achievement of early literacy skills from kindergarten through sixth

grade (Hasbrouck & Tindal, 2006). The test uses one-minute fluency measures to monitor the development of early literacy and early reading skills. The test consists of seven criteria that include phonemic awareness, alphabetic principle, accuracy and fluency with connected text, reading comprehension, and vocabulary. Phonemic Awareness assesses a student's ability to hear and use sounds in spoken words. Initial Sounds Fluency assesses a student's ability to identify and produce the initial sound of a given word (Good, Kaminski, Shinn, Bratten, Shinn, Laimon, Smith, & Flindt, 2004). The Alphabetic Principle and Phonics assessment measures students' ability of knowing the sounds of the letters and sounding out written words and unfamiliar "nonsense" words (Good, et al., 2004). Accurate and Fluent reading requires reading stories and other materials easily and quickly with few mistakes. Vocabulary requires understanding and correctly using a variety of words. Comprehension requires understanding what is spoken or read. DIBELS was designed to assist educators in identifying students experiencing difficulty in gaining basic early literacy skills (Hasbrouck et al., 2006). Educators use DIBELS to provide support early and prevent the incidence of later reading difficulties. DIBELS is administered two times in all kindergarten, first, second, and third grade students in the Summer Literacy Program. When used together, they have been found to be predictive of later reading proficiency (Good et al., 2004). The assessments are consistent with many of the Common Core Standards in Reading and are designed to help educators determine student progress with reading skills.

Research Question

The following research question addressed a comparison of the effects of the summer intervention program pre-intervention and post-intervention on

individuals “at risk” of academic failure.

1. Is there a significant difference in students DIBEL scores from the pre-assessment to the post-assessment for students in grades K-3 attending Summer Literacy Camp?

Null Hypotheses

The following null hypothesis were examined:

1. There is no statistically significant difference in reading skills DIBELS scores before and after Summer Literacy Camp for kindergarten students.
2. There is no statistically significant difference in reading skills DIBELS scores before and after Summer Literacy Camp for first grade students.
3. There is no statistically significant difference in reading skills DIBELS scores before and after summer literacy camp for second grade students.
4. There is no statistically significant difference in reading skills DIBELS scores before and after summer literacy camp for third grade students.

Limitations

The study was subject to the following limitations:

1. The population of this study was limited to students who attended Summer Literacy Camp.
2. The study determined skills for only the subject of literacy skills.
3. This study only looked at the pretest and post-test DIBELS scores.

Assumptions

The following assumptions were related to this study:

1. The students participating attended four full weeks of Summer Literacy Camp.

2. The students participating completed home daily assignments with parent support.
3. All DIBELS administrators were highly qualified and followed the required procedures.
4. DIBELS scores were reported accurately.

Definitions of Terms

The following terms were used in this field study:

1. At-Risk of Academic Failure: A student who is more likely than others to fail academically based on circumstances that the student cannot change without proper intervention (Byrnes & Myers, 2010).
2. Dynamic Indicators of Basic Early Literacy Skills (DIBELS): Is a series of testing procedures that uses criterion-referenced target scores to measure the achievement of early literacy skills from kindergarten through sixth grade (Hasbrouck & Tindal, 2006).
3. Initial Sound Fluency (ISF): Assesses a child's skill at identifying and producing the initial sound of a given word (Good, et al., 2004).
4. Interventions: Designed to identify and treat learning difficulties as early as possible in order to prevent more serious disability, ensure the maximum growth and development of each child, and assist families as they raise a child with learning difficulties (National Institute for Literacy, 2006).
5. Letter Naming Fluency (LNF): Assesses a child's skill at identifying letters (Good, et al., 2004).

6. Nonsense Word Fluency (NWF): Assesses a child's knowledge of letter-sound correspondences as well as their ability to blend letters together to form unfamiliar "nonsense words" such as ut, flk, lig, etc. (Good, et al., 2004).
7. Oral Reading Fluency (ORF): Assesses a child's skill at reading connected text in grade-level materials (Osborn, 2007).
8. Phonemic Segmentation Fluency (PSF): Assesses a child's skill at producing the individual sounds within a given word (Good, et al., 2004).
9. Retell Fluency (RTF): Assess a child's understanding of verbally read connected text (Good, et al., 2004).
10. Summer Literacy Camp (SLC): A literacy program used to improve reading skills in young students (Graham, McNamara, and Van Lankvied, 2010).
11. Word Use Fluency (WUF) Assesses a child's verbal skill using vocabulary (Good, et al., 2004).

CHAPTER II

Review of the Literature

Introduction

As school districts struggle to meet the new state requirements for student achievement, the need for strong reading and writing skills is extremely important. Students are required to complete several state mandated assessments during each school year. The Tennessee Comprehensive Assessment Program (TCAP) is a set of statewide assessments used to measure students' skills and progress. The Constructed Response Assessment (CRA) focuses on math content but requires the student to explain in writing their content knowledge and their ability to perform the math task. The Tennessee Comprehensive Assessment Program (TCAP) Writing Assessment is a reading incentive and prompt that students are required to read before they begin to write (Tennessee Department of Education, 2012). The purpose of this review of literature is to provide important information related to improving student-reading skills. The areas discussed are: (a) what is fluent reading: (b) the history of reading (c) reading interventions, (d) the DIBELS, assessment instrument and (e) Summer Literacy Camp.

Research has concluded that reading fluency is critical to students' overall academic success; therefore, students need proper reading skills to avoid struggles and failures in school (Osborn, 2007). In addition, students need reading skills to complete math solutions, and to understand science and history materials as well as everyday life skill situations (Osborn, 2007). Students who do not have strong reading skills most often struggle across the curriculum academically, often face retention, or do not graduate from high school (Anderson, Wang & Gaffney, 2006). Often these circumstances lead to

a sense of discouragement about attending college and following life-long dreams (Osborn, 2007). Researchers and educators completed numerous studies to determine strategies, programs, and techniques to improve and teach reading fluency to students across the world (Osborn, 2007; Anderson, Wang & Gaffney, 2006; Hasbrouck & Tindal, 2006).

According to the National Reading Panel (NRP) in 2000 reading involved a combination of alphabetic principles, phonological awareness, fluency, comprehension, vocabulary, and oral language. Alphabetic knowledge required students to recognize the names and shapes of letters. This enabled them to begin to understand that letters put together in a specific order make words. Phonological awareness helped beginning readers see the relationships between the sounds of spoken language and the letters of written language. This allowed students to recognize familiar words and sound out words they do not know. Fluency means readers can recognize words automatically. They were able to group words quickly to help them comprehend what they are reading (Good, et al., 2004). Comprehension skills also played an important role in reading success. Comprehension was the understanding of many types of text such as non-fiction and fiction. This important component allowed students to grow in vocabulary needed for writing and speaking (Good, et al., 2004). Students must have vocabulary and background knowledge to be successful with comprehension skills and to be accepted in society as literate (Anderson et al., 2006). Oral language provided students with the ability to accurately use words in the proper context of a sentence. It is important for students to have a full understanding of all the fluency components to be successful in reading (NRP, 2000).

Educators play an important role in preparing students to become successful with reading skills and become productive adults (Osborn, 2007). Teachers use many different research-based methods to teach reading fluency to students as early as preschool through third grade (Osborn, et al., 2003). Research indicated that when students do not learn the important skills for reading by third grade, they will continue to struggle throughout their academic career and possibly for a lifetime (Anderson, et al., 2006). Therefore, early intervention is important and can make a difference for struggling readers. Research found that 85 percent of struggling readers respond positively to prevention and intervention programs implemented before third grade (Lesnick, et al., 2006). However, if intervention is delayed until 9 years of age, approximately 75 percent of children will continue to struggle with reading skills throughout their academic career (Lesnick, et al., 2006). Because the critical time period for supporting reading occurs in the early grades, it is critical for educators to provide prevention efforts that are focused on grades K-3 (Lesnick, et al., 2006).

Learning to read starts very early in a child's life, long before he or she goes to school. Children begin to learn about the sounds they hear spoken around them as soon as they are born (National Institute for Literacy, 2006). They begin to understand written language when they hear adults read stories and sing to them. Parental support is the beginning of a child's success as becoming a reader by being an example and simply reading books, newspapers, or magazines daily.

Educators begin introducing important social skills as an introduction to literacy. Teachers will show students appropriate ways to talk and listen, ask and answer a question, and give and follow direction (National Institute for Literacy, 2006). Students

will be asked to retell stories and tell new stories. Teachers instruct students' on how books should be handled and how to read from front to back, from the top to the bottom of a page, and from left to right on a page.

Phonemic awareness is the next step for beginning readers. Educators teach students the names and shapes of all the letters of the alphabet and encourage the students to listen and learn the sounds they make (National Institute for Literacy, 2006). Teachers used explicit instruction to introduce blending sounds together to make words and break words into separate sounds. Students practice by reading easy books that contain words with letter-sounds they are familiar with. Phonics is described as teaching students a combination of letter recognition and letter sounds (National Institute for Literacy, 2006). This strategy is introduced and taught at the beginning of kindergarten to help students understand that letters represent a specific sound and that letter sounds make up words. Students begin by using first sound recognition in vocabulary words and word walls (Osborn, 2007). Once first sound recognition is accomplished, the student will begin to recognize vowels, ending sounds, and word families (Fisher, 2004). The next step is for students to understand that letters go together in a special order to make words important for verbal communication and written language (Osborn, 2007). These important steps help students recognize the relationships between words and begin to put words together for writing and spelling purposes (Fisher, 2004). Educators establish this by demonstrating the syllables in words and stretching out words and then putting them back together to make the word. This skill can be assessed and monitored by teachers using DIBLES Phoneme Segmentation Fluency (PSF). Students' skills are measured by showing their ability to segment three-and four phoneme words into individual phonemes

fluently (Good, et al., 2004). For example, the teacher ask the students to says all the sounds they hear in the word “mat” and the students say “/m/ /a/ /t/” to receive credit. This measures the students’ ability to hear the sounds in spoken words as well as understand that spoken words and syllables are made up of sequences of speech (Good, et al., 2004).

Building vocabulary and knowledge of the world is another important component for reading. Teachers teach students new vocabulary as they read aloud each day. The student is asked to connect the new vocabulary words to real world experiences and to collaborate new ideas with other students (National Institute for Literacy, 2006). These activities strengthen social skills needed for connecting written and spoken language and developing vocabulary. Educators choose books that students can use to compare and connect fiction and non-fiction information for future reference. Students acquire substantial new vocabulary through the interaction of a daily read-aloud. They learn to connect vocabulary and knowledge for collaboration of social skills (National Institute for Literacy, 2006). This skill can be assessed and monitored by teachers using the DIBLES, Word Use Fluency (WUF). Students were measured by showing their ability to use a word in context verbally for comprehension purposes (Good, et al., 2004). For example, the educator will ask a student to use the word “stone” in a sentence. The student must use the word correctly to receive points. The WUF assessment shows educators the student’s knowledge to use general vocabulary for reading comprehension (Good, et al., 2004). The enthusiasm for words and language brings a new joy for reading and vocabulary.

Students are also required to use their memory for new words in the English language that are not easy to sound out and are used often in everyday discussion (Anderson, et al., 2006). Students are simply required to memorize these words by continuous practice and drill sessions; teachers, classmates, and parents conduct these sessions. This memorization drill can be made into a game of bingo, as well as fun productive card games. Combinations of all the skills are important for reading success and must be used to build strong and effective reading skills for students to perform at their full academic potential (Fiene & McMahon 2007).

Fluency is an important component of reading. It is mastery of word recognition skills to the point of comprehension. Teachers build fluency by reading aloud to children and modeling fluent reading. Teachers listen to children read aloud and provide assistance and encouragement until they become fluent (National Institute for Literacy, 2006). Teachers take notes and time the student reading rates using a stopwatch to monitor and collect data of progress. The data from the students' progress helps the teacher identify reading skills that need focus and need to be strengthened. Students become fluent readers by rereading books and passages aloud. Teachers use many strategies to enhance this important skill such as verbal observation of students' spoken language (Anderson, et al., 2006). Students are prompted with a word and asked to make a sentence. The goal of this fluency activity is for students to use their spoken vocabulary to make complete sentences that express something about the given word (Barger, 2003). This strategy provides practice of verbal expression to enhance writing, listening, and reading skills (Fiene & McMahon 2007). This skill can be assessed and monitored by teachers using DIBLES Oral Reading Fluency (ORF). Students are

assessed by their ability to read a grade appropriate reading passage with 95% accuracy. The test helps to identify children who may need additional instructional support in fluency (Good, et al., 2004).

Comprehension skills are taught by using questions and answers to discuss a combination of fiction and nonfiction texts (Fiene & McMahon 2007). This skill is most important for academic understanding. Students must be able to comprehend what they read in order to understand the text and for test taking purposes (Applegate, Applegate, & Modla, 2009). Teachers can assist students with this skill by first teaching the understanding of important vocabulary from the text that students possibly might not know (Anderson, et al., 2006). A procedure teachers use to work on comprehension skills is to ask questions about the possible predictions of the story to build background knowledge before reading the story (Applegate, et al., 2009). Working on background knowledge first allows students to start thinking about what they already know and how it relates to their life. This can be observed by using question and answer discussions with students (Anderson, et al., 2006). Students are prompted to answer questions about what they think the story will be about by doing a picture walk or by discussing the title and author's purpose for the story. Important questioning such as this allows the teacher and student to build background knowledge necessary for comprehension of the material from the story.

The teacher will read the story, and the students will be asked to discuss the setting, characters, beginning, middle, end, main idea, purpose, problem and solution (Applegate, et al., 2009). Open questioning helped students to build important comprehension skills needed to become fluent readers and understand what they are

reading about as well as the knowledge learned during the story (Anderson et al., 2006). A combination of fluency and comprehension skills are important to reading success and must be used to build strong and effective reading skills for students to perform at their full academic potential. This skill can be assessed using DIBELS Retell Fluency (RTF). RTF is intended to measure a student's ability to retell a passage in his or her own words (Good, et al., 2004).

History of Reading

Early intervention for reading has been a concern of and studied by educators since the 1980s (Vaugh, Thompson, & Hickman 2003). It is believed that almost all children can learn to read in kindergarten, first, and second grade; however, some students require more help to reach this goal. Reading intervention programs are designed to narrow the achievement gap between students who are proficient in reading language arts and those who are not as measured by DIBELS (Vaugh, et al., 2003).

It is important for parents and school systems to work together to close the gap. (Harris & Goodall 2007). There are many challenges for students in the education system; therefore, schools and teachers need support to educate children from family members. Research indicated that parents play a major role in how students feel about school and their academic performance in school and future (Harris & Goodall, 2007). Schools are under enormous pressure to improve test scores and increase academic achievement. This increased pressure on schools puts parents in a position to provide extra support and attention to make sure their child is ready to learn when they reach school (Vaugh, et al., 2003).

Parental involvement can take place in or outside of the classroom. Parents' intentions are to help improve their child's academic success (Harris & Goodall, 2007). Parental involvement at home may be as simple as discussing the school day, being involved with homework assignments, and being supportive of discipline issues reported from the teacher (Vaugh, et al., 2003). Parental involvement at school may consist of being Parent Teacher Organization (PTO) members, volunteering as a classroom parent, attending workshops on how to help students be successful academically as well as attending school plays and sporting events (Harris & Goodall, 2007). School systems have conducted extensive research on the effects of parental involvement and how it impacts students academically. The results consistently show that parent involvement, small or large, have a positive effect on the students' overall interest and academic success (Harris & Goodall, 2007). Family involvement was proven to be helpful but often not enough because the family may struggle themselves with reading skills, this makes it impossible for the family to help their child. Schools often conduct classes to educate parents on how to help their child. These classes can be very helpful, but often the parents who need them do not attend (Hasbrouck, et al., 2006).

Keeping students engaged in the learning environment is a daily challenge for teachers. With parental support, this problem can be minimized. Parents can help by showing interest in their child's education, such as attending an open house or volunteering in the classroom (Vaugh, et al., 2003). When students see their parent helping in the classroom, it gives them a sense of ownership and pride. The students begin to see how important it is to their parent, and they begin to give school a higher level of importance (Maxwell & Delaney, 2003). Parents can also help by

communicating positively about the teacher and school, as well as discussing learning activities. This allows the student to gain respect for his or her teachers and his or her education. Parents can continue learning even beyond homework and the classroom by reading books or going to museums (Maxwell & Delaney, 2003). These types of experiences will allow students to see that education is a real world experience and important in every aspect of their lives. Most students want to enjoy school and do well in their class work. When teachers and parents bond together, they give students an increased sense of confidence that they can succeed in school (Perfetti & Marron, 1995).

Parent involvement is important because it supports the student's academic success and future (Harris, et al., 2007). Every parent who has a child between the ages of 5 and 18 should be involved with the school, their child's teachers, and the learning process (Fisher, 2004). Research found major reasons that parents should be involved in their child's education: 1) They perform better in school and have higher test scores, 2) Graduate from high school at better rates, 3) Are more likely to go on to higher education, and 4) Are better behaved and have a more positive overall attitude (Fisher, 2004). Parental involvement is an investment for families because when a child is successful in school, they have an increased chance of being successful in their future lives. Students who graduate from high school are more likely to become successful adults, which is what most parents want for their child.

One major outcome of parental involvement is that it can improve school performance and create higher test scores (Fisher, 2004). All parents want to see their child's report card improve. Parents can help by discussing report card grades and helping children study for tests. This type of dedication shows the student how important

their success is to their parents and helps them gain ownership of their responsibilities. Over time the student-parent relationship will become more positive as the parent becomes more interactive with their child's school, and the student will gain confidence in his or her ability to do well in school (Fisher, 2004).

Parental involvement increased the student's likelihood of graduating from high school and going on to higher education (Jerald, 2006). School graduation is important because it reduces the negative impact on society as well as the family (Maxwell & Delaney, 2003). A child who graduates from high school has more potential to have a higher income and more job opportunities as compared to students who do not graduate. Parents can help by encouraging their child to go to school and do their best even when they may not feel like it (Jerald, 2006). High rates of student absenteeism are associated with increased risk of students dropping out of school (Vaugh, et al., 2003). The school dropout rate is a very serious and unfortunately a common problem. Approximately five out of every 100 high school students drop out of school (Vaugh, et al., 2003). When a parent discusses the importance of graduating in everyday conversation and is a positive role model, their child will better comprehend the magnitude of the importance of an education.

Parental support concerning behavior in the classroom is another way parents can get involved and show support for academic success (Fisher, 2004). Parents should communicate with their child's teacher about behavior in the classroom. Working with a teacher about the proper way to behave and present oneself in the classroom is extremely important to a child's academic success as well as the rest of the students in the class (Fisher, 2004). This is critical because the less time a teacher spends redirecting and

discussing proper behavior, the more time she or he has to spend on teaching the standards needed for learning the objective (Fisher, 2004).

Reading Interventions

Researchers believe high expectation and high standards for students have caused a dilemma for educators and students. As a result, grade retention is being used as a solution as well as an intervention for the low performing students (David, 2008). It is impossible for school systems to retain every student who falls behind because it is expensive, and the lower grades would be over crowded. Often students are moved to the next level without the skills they need to be successful. School system personnel have debated whether these students benefit more from being retained or from moving ahead to the next grade level. The decision for retention is often made by a state mandated test that limits teachers' discretion for promotion and may result in false information or unneeded retentions (David, 2008).

Jane David (2008), conducted a meta-analysis study on struggling readers. She focused on retention in elementary grades and the effects of retention. The meta-analysis consisted of 44 different studies taken in 1975. The results showed that grade retention is more beneficial than grade promotion. Ten years later, the same study showed that promoted students had higher academic achievement and better personal adjustment (David, 2008). Recent studies conducted in 2005 show student retained are five times more likely to drop out of school. After comparing various studies, David concluded that over all, the evidence argued that students who repeat a grade are no better off, and are sometimes worse off, than if they had been promoted with their classmates. A major weakness in the research on retention is documenting the educational experiences of

students who are retained (David, 2008). Many researchers think that retention should not be based on state mandated testing because that assumes that everyone thinks and learns the same (David, 2008). The goal of retention is to provide an opportunity for students to catch up academically and maintain self-esteem; however, this is not the case. Instead students fall further behind and often fail to graduate from high school because of their struggles with retention (David, 2008).

Although researchers believe that retaining students is not the answer to a student's academic success, many advocates of grade retention say that retention in the primary elementary grades is the exception (Silberglitt, Jimerson, Burns, & Appleton, 2006). Approximately 2.4 million children, or 5-10% of the school-aged population, have been retained each year, but logical research has consistently revealed small to moderate positive effects to be related to future academic success as well as little to no positive effects on social emotional development (Silberglitt, et al., 2006). This data lead Silberglitt, et al (2006) to conduct a study to provide information about the pros and cons to retaining in early grades K-2 as opposed to later grades 3-6.

The study consisted of 49 students from five districts in Minnesota. The students were divided in two groups; 27 were early retained and 22 were later retained. The students consisted of 17 females and 32 males with ethnicity of the total sample 6.1%, African American, 2.0% Asian, 85.7% Caucasian, and 6.1% Native American, and 29 students were eligible for free or reduced lunch (Silberglitt, et al., 2006). Of the sample, two students were retained in kindergarten, 19 in first grade, six in second grade, nine in third grade, eight in fourth grade, and five in fifth grade (Silberglitt, et al., 2006). The students were tested using reading passages for each benchmark, fall, winter, and spring.

Standardized grade appropriate passages were administered at each grade level. Student data consisted of the median number of words read correctly for three passages. Reading was assessed because most academic classes require average reading and comprehension skills to be successful (Silbergliitt, et al., 2006).

The results from the study showed that there was not a significant difference in the linear slope for the two growth curves (Silbergliitt, et al., 2006). The group retained in their older years had a negative growth curve, while the group retained in their earlier years had a positive curve of growth. The growth curve suggested that students retained later had a more rapid slow-down of growth compared to the more consistent progress rate of the early-retained students. Rather than perceiving this as a benefit for early retentions, it is possible that these results have greater negative effect from later retentions. Research has consistently found a negative social emotional impact from grade retention. It is possible that this effect is stronger for students who are older and more emotionally mature at the time of retention. However, this is only one possible explanation of this finding, and previous research literature was seemingly void of comparisons between effects of early and later grade retention. Thus, these data should be interpreted carefully, and replication is needed before confident interpretations can be made (Silbergliitt, et al., 2006).

According to Hasbrouck (2006), retention is not the answer because it only covers up the deficiency instead of dealing with the student's needs one on one. Students often lose self-esteem, and this makes it hard for them to make friends and grow socially. Graduation for these students gets further away, and they often drop out and never earn a high school diploma (Hasbrouck et al., 2006).

Summer Literacy Reading Interventions

Intervention-based reading programs, which will enhance student reading skills and academic achievement, are continuously being sought to meet federal and state standards. Many educators believe that the implementation of reading and mathematics summer camp programs could help students become more successful readers and academically successful (Graham, McNamara, & Van Lankvied, 2010). Summer literacy programs prove to be very beneficial by using small group interventions for four weeks of the summer vacation. Certified, highly trained teachers took part in the summer program proving the importance of interventions and academic success. The program was implemented to help teachers and students understand the need and importance of interventions, academic progress, and the element of fun in learning. The program provided important intervention to stimulate number sense by using one-to-one correspondence. Furthermore, this program was implemented to give students the opportunity to simply sit down with a teacher and work on skills needed for a successful result (Graham, et al., 2010). The students were encouraged to have fun in stations related to real life experience and group activities.

The program began with a pre-test for every student to provide important data to the teachers. The data was collected to drive the instruction and interventions to be used. The students met with their teacher daily for whole group instruction and small/individual instruction. Students participated in station activities with a peer to practice their previously learned skills. The teacher completed a post-test weekly for documentation of each student's progress. The new weekly data provided important information about the next week's instruction. The authors noted that many students today are struggling

academically because of the lack of interventions in small group. This study indicated that students could be successful when they are instructed on the specific skills they are lacking. The focus on specific skills was very difficult to accomplish without proper interventions. There was a great need for students to be allowed to learn in a small and fun environment. The author stated that the teachers working with this program found it very rewarding and were grateful to be a part of such a successful intervention program (Graham, et al., 2011).

A study of positive effects of early intervention and summer literacy programs for low social economic families consisted of fourteen preschool aged students and their families (Tichenor & Playchan, 2010). The parents of the students were educated during seminars for early interventions. This program provided the parents with important skills and interventions to help their child become successful readers (Graham, McNamara & Van Lankveid, 2011). The students attended the summer literacy program for six weeks and were taught literacy skills by highly qualified teachers. The teachers used pretest data to drive instruction for each individual student. The student worked on age appropriate literacy skills and intervention to provide strong phonic skills. Highly qualified teacher educated parents of these students during parent workshops. The parents learned the importance of reading daily to their child in addition to the importance of providing positive reading environments in the home. According to Graham (2011), it is just as important for parents to know how to help their child as it is to teach the child. He stated that it is a family effort for a child to become successful academically.

Trichenor and Playchan (2010), stated that the effectiveness of summer family literacy programs for young children could change the future of education, meaning that educators need to not only educate the student, but the family as well. He also found that these types of programs put students on the right path before they enter school and allowed them to start out at a level that will help them to become successful (Tichenor, et al., 2010). The sooner young at-risk students begin learning and get their families involved, the less likely they become part of the system of at-risk students. According to Tichenor, et al., (2010), the important facts about early literacy are all students must become literate as early as possible, learn appropriate literacy skills allowing students to reach their goals, and realize that reading is the key to academic freedom.

Finding Design

Tichenor and Playchan (2010), collected data to guide the instruction and interventions to be used. The students met with their teacher daily for whole group instruction and small/individual instruction. The student participated in station activities with a peer to practice their previously learned skills. The teacher completed a post-test weekly of each student's progress (Tichenor, et al., 2010). The new weekly data provided important information about the next week's instruction. The authors noted that many students today are struggling academically because of the lack of interventions in small group (Tichenor, et al., 2010). This study found that students can be successful when they are instructed on the specific skills they are missing (Tichenor, et al., 2010). This is often difficult to pin point without interventions. The author stated that the teachers working with this program found it very rewarding and were grateful to be a part of such a successful intervention program (Tichenor, et al., 2010).

Graham (2010), stated that the effectiveness of summer family literacy programs for young children could change the future of education, meaning that educators not only educate the student but the family as well. He also found that this type of program puts students on the right path before they enter school and allows them to start out at a level that will help them to become successful. The sooner these young at-risk students begin to learn and get their families involved, the less likely that they became part of the system of the at-risk student.

DIBLES

DIBLES was developed based on measurement procedures for Curriculum-based Measurement (CBM). The short one-minute assessments were specifically designed to measure the five pillars of early literacy: Phonological Awareness, Alphabetic Principle, Fluency with Connected Text, Vocabulary, and Comprehension. DIBELS provides connection to reading proficiency and helps educators determine student progress. The assessments are aligned with many of the Common Core State Standards in Reading and often guide teacher instruction. These assessments help prevent the occurrence of reading failure by assisting educators in maintaining gains and identifying students in need of intervention.

DIBLES short one minute assessments are based on grade levels that focus on phonological awareness, word use fluency, letter recognition, first sound fluency, nonsense words, word identification, retell, and reading (Wilson, 2005). These assessments are administered as benchmarks during a regular school year, and are administered as a beginning of the year assessment, middle of the year assessment, and finally an end of the year assessment (Barger, 2003). Students who score at-risk are

progress monitored every ten days (Wilson, 2005). Progress monitoring takes place after the child has received ten days of interventions in the area that indicated a deficiency (Barger, 2003).

DIBELS provides a test to assess Phonological Awareness. This consists of Letter Naming Fluency (LNF), Initial Sounds Fluency (ISF), and Phonemic Segmentation Fluency (PSF). Letter recognition is tested as Letter Naming Fluency (LNF). It takes place by teaching the student that each letter is different and has a specific written form and place in a word as well as the alphabet (Osborn, 2007). Letter sound is tested as Initial Sound Fluency (ISF). Initial Sound Fluency (ISF) measures the student's ability to identify and produce the first sound of a given word. Phonemic Segmentation Fluency (PSF) assesses a student's skills at producing the individual sounds within a given word. DIBELS provides a test to assess Alphabetic Principles and Phonics. Nonsense Word Fluency (NWF) assesses the student's ability to use the most common letter sounds and the student's ability to blend letters into words verbally.

DIBLES standardized tests can provide an educator with valuable information about a student's reading abilities (Wilson, 2005). DIBLES is important to teachers because it can help them understand areas in which a student struggles. DIBLES breaks down all of the elements of reading and gives the teacher information using the proper intervention. DIBLES is an indicator of deficiency and can help educators determine how to help students overcome them (Wilson, 2005).

Summary

Struggling readers need additional and consistent help from the school system. Many of these students are from low socioeconomic families who struggle to read themselves. Often, education is not always at the forefront of all life styles, and this leads to a potential for students' poor academic performance (Hasbrouck & Tindal, 2006). Educators are always looking for a way to provide these students with the support they need to be successful (Hasbrouck et al., 2006). Summer Literacy Camp can be a positive way to get parents involved and educate students in a small group setting. DIBLES can be used as an indicator for determining who should attend Summer Literacy Camps, to monitor students' progress, and to determine overall student achievement. Graham (2010), stated that the effectiveness of summer family literacy programs for young children could change the future of education, meaning that educators not only educate the student but the family as well. The following study on the effects of Summer Literacy Camps determines the impact on students' academic success.

CHAPTER III

METHODOLOGY

Overview

The purpose of the study was to establish if there was a relationship between pre-intervention and post intervention DIBEL scores of primary grade students who had been identified as at-risk for reading. All students identified in the intervention classes participated in Summer Literacy Camp (SLC) program 2012. Teachers were trained in literacy interventions, and there were reading specialists and academic coaches to oversee the teaching and data to keep everyone informed with the explicit instructional model for interventions. Data for this study was collected before the Summer Literacy Camp began and at the end of four week interventions.

The research design used was to compare student achievement in kindergarten, first, second, and third grade students before and after attending Summer Literacy Camp. This study measured achievement by utilizing data from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment. DIBELS was administered at the beginning of camp and at the end of camp. This study assessed significant differences in DIBELS scores for grades K-3.

Research Design

The research design is a quantitative descriptive study. This field study is designed to identify and examine any significant relationships between Summer Literacy Camp and increased academic achievement. It will distinguish the relationship between pre-intervention and post intervention scores based on DIBELS prior to and post Summer Literacy Camp. The statistical design will be the *t*-test and the *f*-test (ANOVA).

Participants

Summer Literacy Camp programs are conducted each year for students who qualify for reading intervention. Highly qualified teachers, administrators, and academic coaches administer this program. Students were selected based on low DIBELS scores that show at-risk factors in reading skills. The selected students and their guardian were required to sign a contract stating that they agree to attend regularly and complete all reading assignments. The teacher used data collected from the students' previous teachers to create interventions designed to make individual gains toward reading success.

This study assessed DIBELS scores from 71 primary students in kindergarten, first, second, and third grade who attended Summer Literacy Camp. Participants involved in the study were invited to attend Summer Literacy Camp for four weeks in the month of June, 2012. Participants were selected based on low performance on the DIBELS assessment during the 2011-2012 school year and teacher recommendations.

Instrument

This study measured achievement by utilizing data from a Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment. DIBELS is a set of standardized individually administered measures of early literacy development. The DIBELS assessment tools were developed at the University of Oregon by Roland H. Good and Ruth A. Kaminski (2004). The assessments are one-minute tests designed to predict and show fluency measures and are used to regularly monitor the development of pre-reading and early reading skills. Clarksville Montgomery County administers DIBELS assessments three times a year: the beginning, middle, and end of the school year. This

study compared end of the year DIBELS scores from 2012 to identify students at-risk for reading deficiency and eligibility for Summer Literacy Camp. The test also provided teachers with information for interventions needed to show improvements.

Data Collection Procedure

Prior to collection of data, permission was sought to conduct research from the Institutional Review Board at Austin Peay State University (see Appendix A). Additionally, a request was sent to the Director of Curriculum the Clarksville Montgomery County Research Committee requesting permission to conduct this field study in the school system (see Appendix B). These letters provided an overview of the field study.

After approval from Austin Peay State University and Clarksville Montgomery County School System, data (see Appendix C) was gathered for kindergarten, first, second and third grade students who participated in Summer Literacy Camps. Kindergarten data collection consisted of three DIBLES tests: Letter Naming Fluency (LNF), Nonsense Word Fluency (NWF), and Phonemic Segmentation Fluency (PSF). First grade data collection consisted of four DIBLES tests: Nonsense Word Fluency (NWF), Whole Words Read Fluency (WWR), Oral Reading Fluency (ORF), and Retell Fluency (RF). Second grade data collection consisted of two DIBLES tests: Oral Reading Fluency (ORF), and Retell Fluency (RF). Third grade data collection consisted of two DIBELS test: Oral Reading Fluency (ORF), and Retell Fluency (RF). DIBELS scores were retrieved and coded by authorized school personnel so that no student or teacher identifiers were revealed (see Appendix D).

Data Analysis Plan

Students were given an initial DIBELS assessment prior to the beginning of the Summer Literacy Camp. Weekly progress monitoring assessments were done to monitor students' needs and provide appropriate interventions. Each grade level used the end of year DIBELS assessment as the entering and exiting data. Student scores were generated through Test Drive software. Test scores were reported for the participating grade levels and DIBLES subtest (LNF, NWF, PSF, WWR, ORF, and RF) to compare scores prior and post for Summer Literacy Camp participants.

Minitab Statistical Software was used to conduct un-paired *t* test for grade levels kindergarten, first, second and third grade DIBELS to compare scores prior and post to Summer Literacy Camp 2012. Analysis of Variance (ANOVA) was utilized using Minitab to determine significant difference in the DIBELS subset scores before and after Summer Literacy Camp was implemented. Hypotheses were tested at the .05 level of significance.

Chapter IV

Data Analysis and Results

Introduction

The purpose of the study was to determine the effects of Summer Literacy Camp on student DIBELS scores from pre-intervention at the beginning of the program to the post intervention at the end of the program. Data for the study was collected at the beginning of the program and the end of the program. Pre-intervention DIBELS scores were taken from the May 2012 end of the year data. The scores were compared to determine if the student would benefit from reading interventions. The students that scored at risk on DIBELS were asked to attend Summer Literacy Camp 2012.

Presentation and Analysis of Data

The null hypothesis (H_1) stated that there was statistically significant difference between kindergarten students who attended summer literacy camp on the pre- and post-subtests of Letter Naming Fluency (LNF), Phonemic Segmentation (PSF), and Nonsenses Word Fluency (NWF). The kindergarten students’ pre-and post-test scores on each of the three subtests were analyzed using Minitab Student Release 14. A paired t -test was performed and a statistically significant difference was found. See Tables 1 through 3 below for a summary of the results. The null hypothesis (H_1) was rejected.

Null Hypothesis # 1

Table 1. Summary of Kindergarten Scores on Letter Naming Fluency (LNF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	26	60.2692	14.2339		
Pre	26	44.3462	13.6087	8.62	0.00

Table 2. Summary of Kindergarten Scores on Phonemic Segmentation (PSF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	26	72.7308	6.0640		
Pre	26	59.5385	12.1630	5.5	0.00

Table 3. Summary of Kindergarten Scores On Nonsense Word Fluency (NWF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	26	41.5385	19.6494		
Pre	26	31.6154	14.4002	3.67	0.001

The null hypothesis (H_1) stated that there was statistically significant difference between kindergarten students who attended summer literacy camp among the mean gains for the subtests of Letter Naming Fluency, Phonemic Segmentation, and Nonsense Word Usage. Minitab Student Release 14 was used to perform a one-way Analysis of Variance (ANOVA) among the mean gains for the three above sub-tests. The analysis showed that there was a statistically significant difference among the three sub-test gains.

The results are summarized in Table 4 below.

Table 4. Analysis of Variance Among Gains on LNF, PSF, and NWF

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
LNF	26	15.88	10.23		
PSF	26	22.38	37.74		
NWF	26	8.62	11.90	2.22	0.116

Null Hypothesis # 2

The null hypothesis (H_2) stated that there was statistically significant difference between first grade students who attended summer literacy camp on the pre- and post-subtests of Nonsense Word Fluency (NWF), Whole Words Read (WWR), Oral Reading Fluency (ORF), and Retell Fluency (RF). The first grade students' pre-and post-test scores on each of the four subtests were analyzed using Minitab Student Release 14. A paired t -test was performed and a statistically significant difference was found. See Tables 5 through 8 below for a summary of the results. The null hypothesis (H_2) was rejected.

Table 5. Summary of First Grade Scores on Nonsense Word Fluency (NWF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	23	74.8261	22.6749		
Pre	23	55.4783	15.4769	4.73	0.000

Table 6. Summary of First Grade Scores on Whole Words Read (WWR)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	23	22.3478	10.2762		
Pre	23	11.5652	8.3111	5.81	0.000

Table 7. Summary of First Grade Scores on Oral Reading Fluency (ORF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	23	56.3913	18.2377		
Pre	23	38.8696	19.3914	7.48	0.000

Table 8. Summary of First Grade Scores on Retell Fluency (RF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	23	37.9130	12.3837		
Pre	23	19.8696	14.0690	8.50	0.000

The null hypothesis (H_2) stated that there was a statistically significant difference between first grade students who attended summer literacy camp among the mean gains for the subtests of Nonsense Word Fluency (NWF), Whole Words Read (WWR), Oral Reading Fluency (ORF), and Retell Fluency (RF). Minitab Student Release 14 was used to perform a one-way Analysis of Variance (ANOVA) among the mean gains for the four above sub-tests. The analysis showed that there was a statistically significant difference among the four sub-test gains. The results are summarized in Table 9 below.

Table 9. Analysis of Variance Among Gains on LNG, PSF, and NWF

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>f</i>	<i>p</i>
NWF	23	20.57	18.70		
WWR	23	10.78	8.90		
ORF	23	20.17	15.03		
RF	23	18.17	10.47	2.49	0.065

Null Hypothesis # 3

The null hypothesis (H_3) stated that there was no statistically significant difference between second grade students who attended summer literacy camp on the pre- and post- subtests of Oral Reading Fluency (ORF), and Retell Fluency (RF). The second grade students' pre-and post-test scores on each of the four subtests were analyzed using Minitab Student Release 14. A paired *t*-test was performed and a statistically significant

difference was found. See Tables 10 and 11 below for a summary of the results. The null hypothesis (H_3) was rejected.

Table 10. Summary of Second Grade Scores on Oral Reading Fluency (ORF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	15	89.1333	27.7408		
Pre	15	76.3333	33.0382	3.66	0.003

Table 11. Summary of Second Grade Scores on Retell Fluency (RF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	15	49.2667	14.7816		
Pre	15	38.1333	16.6984	2.48	0.027

The null hypothesis (H_3) stated that there was statistically significant difference between second grade students who attended summer literacy camp among the mean gains for the subtests of Oral Reading Fluency (ORF), and Retell Fluency (RF). Minitab Student Release 14 was used to perform a one-way Analysis of Variance (ANOVA) among the mean gains for the four above sub-tests. The analysis showed that there was a statistically significant difference among the two sub-test gains. The results are summarized on Table 12 below.

Table 12. Analysis of Variance Among Gains on ORF and RF

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>f</i>	<i>p</i>
ORF	15	13.1333	17.01		
RF	15	12.8000	13.54	0.09	0.933

Null hypothesis # 4

The null hypothesis (H_4) stated that there was statistically significant difference between third grade students who attended summer literacy camp on the pre- and post-subtests of Oral Reading Fluency (ORF), and Retell Fluency (RF). The third grade students' pre-and post-test scores on each of the four subtests were analyzed using Minitab Student Release 14. A paired t -test was performed and a statistically significant difference was found. See Tables 13 and 14 below for a summary of the results. The null hypothesis (H_4) was rejected.

Table 13. Summary of Third Grade Scores on Oral Reading Fluency (ORF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	7	102.571	25.258		
Pre	7	80.143	17.063	4.31	0.005

Table 14. Summary of Third Grade Scores on Retell Fluency (RF)

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	7	58.5714	16.1127		
Pre	7	32.4286	7.7213	5.40	0.002

The null hypothesis (H_4) stated that there was statistically significant difference between third grade students who attended summer literacy camp among the mean gains for the subtests of Oral Reading Fluency (ORF) and Retell Fluency (RF). Minitab Student Release 14 was used to perform a one-way Analysis of Variance (ANOVA) among the mean gains for the four above sub-tests. The analysis showed that there was a

statistically significant difference among the two sub-test gains. The results are summarized in Table 15 below.

Table 15. Analysis of Variance Among Gains on ORF and RF

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Post	7	22.4286	13.77		
Pre	7	26.1429	12.79	1.66	0.147

CHAPTER V

Summary, Findings, Conclusions, Recommendations

Summary of Study

The purpose of this study was to determine if there is a relationship between pre- and post Dynamic Indicators of Basic Early Literacy Skills (DIBELS) scores of students who attended Summer Literacy Camp (SLC) 2012. This study measured achievement by utilizing data from the DIBELS. The study includes kindergarten, first, second, and third grade students who participated in Summer Literacy Camp 2012. The students received four weeks of intervention to improve reading skills provided by highly trained teachers. Data for this study was collected at the beginning of the camp, and at the end of four weeks. Data was used to guide instruction for small groups and was used as an indicator for success of the program. The major purpose of this study was to determine if Summer Literacy Camp had a significant effect on literacy achievement as measured by DIBELS.

Question one compared pre and post DIBELS scores for kindergarten students who attended four weeks of Summer Literacy Camp interventions. This hypothesis was tested using three DIBELS assessments: Letter Naming Fluency, Phonemic Segmentation Fluency, and Nonsense Word Fluency. The test was administered before and after the Summer Literacy Camp implementation. All unpaired *t* tests evaluating DIBELS scores (LNF, PSF, NWF) 2012 in SLC were found to be statistically significant. This is presented in Tables 1-3. The rejection of the null hypothesis indicated the relationship between Summer Literacy Camp and literacy achievement was statistically significant when considering kindergarten students attending SLC. The analysis of Variance (ANOVA) among the mean gains for the three sub-tests showed that there was

statistically significant difference among the three sub-test gains presented in Table 4. Students who attend Summer Literacy Camp showed significant growth over all tested areas. The study showed that 96% of kindergarten students showed growth in Letter Naming Fluency, 100% of kindergarten students showed growth in Phonemic Segmentation Fluency, and 81% of kindergarten students showed growth in Nonsense Word Fluency (see Appendix A). The first null hypothesis was accepted, showing the students gained literacy skills after SLC implementation.

Question two-compared pre and post DIBELS scores for first grade students who attended four weeks of Summer Literacy Camp interventions. This hypothesis was tested using four DIBELS assessments: Nonsense Word Fluency, Whole Words Read, Oral Reading Fluency, and Retell Fluency before and after the Summer Literacy Camp implementation. All unpaired *t*-Tests evaluating DIBELS scores (NWF, WWR, ORF, RF) 2012 in SLC were found to be statistically significant. This is presented in Tables 5-8. The rejection of the null hypothesis indicated the relationship between Summer Literacy Camp and literacy achievement was statistically significant when considering first grade students. The analysis of Variance (ANOVA) among the mean gains for the four sub-tests showed that there was statistically significant difference among the four sub-test gains presented in Table 9. The rejection of the null hypothesis indicated the relationship between Summer Literacy Camp and literacy achievement was statistically significant when considering first grade students. Students who attend Summer Literacy Camp showed significant growth over all tested areas. The study showed that 91% of first grade students showed growth in Nonsense Word Fluency, 96% of first grade students showed growth in Whole Words Read, 100% of first grade students showed

growth in Oral Reading Fluency, and 100% of first grade students showed growth in Retell Fluency (see Appendix A). The second null hypothesis was accepted, showing the students gained literacy skills after SLC implementation.

Question three-compared pre and post DIBELS scores for second grade students who attended four weeks of Summer Literacy Camp interventions. This hypothesis was tested using two DIBELS assessments: Oral Reading and Retell Fluency before and after the SLC implementation. All unpaired *t*-tests evaluating DIBELS scores (ORF, RF) 2012 in SLC were found to be statistically significant. This is presented in Tables 10 and 11. The rejection of the null hypothesis indicated the relationship between Summer Literacy Camp and literacy achievement was statistically significant when considering second grade. The analysis of Variance (ANOVA) among the mean gains for the two sub-test showed that there was no statistically significant difference among the two sub-test gains presented in Table 12. Students who attend Summer Literacy Camp showed significant growth over all tested areas. The study showed that 94% of second grade students showed growth in Oral Reading, and 94% of second students showed growth in Retell Fluency (see Appendix A). The third null hypothesis was accepted, showing the students gained literacy skills after SLC implementation.

Question four-compared pre and post DIBELS scores for third grade students who attended four weeks of Summer Literacy Camp interventions. This hypothesis was tested using two DIBELS assessments: Oral Reading Fluency and Retell Fluency before and after the Summer Literacy Camp implementation. All unpaired *t*-tests evaluating DIBELS scores (OR and RF) 2012 in Summer Literacy Camp were found to be statistically significant. This is presented in Tables 13 and 14. The rejection of the null

hypothesis indicated the relationship between Summer Literacy Camp and literacy achievement was statistically significant when considering third grade students. The analysis of Variance (ANOVA) among the mean gains for the two sub-tests showed that there was statistically significant difference among the two sub-test presented in Table 15. Students who attend Summer Literacy Camp showed significant growth over all tested areas. The study showed that 100% of third grade students showed growth in Oral Reading Fluency, and 100% of third grade students showed growth in Retell Fluency (see Appendix A). The fourth null hypothesis was accepted, showing the students gained literacy skills after SLC implementation. This study shows that Summer Literacy Camp can be a positive intervention for students learning to read in the primary grade levels.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. The analyses of this study show that Summer Literacy Camp has a positive effect on literacy skills. School Systems should continue to provide Summer Literacy Camp to struggling readers.
2. Summer Literacy Camp should provide transportation opportunities for students who need it. This would allow for more students to attend and progress in literacy. Attendance to the program is important for success. Providing transportation to students who need it can help with consistent attendance.
3. Students who continue to struggle with reading skills should have the opportunity to continue with interventions beyond Summer Literacy Camp.

4. Data should be shared with upcoming teachers to allow intervention continuation.

Future Research

1. It would be beneficial to broaden this study to include more participating schools and evaluate the effect of literacy camps. This field study was limited to a small sample size of one elementary school.
2. This study could be expanded to compare and evaluate achievement gaps in literacy for students using different assessments.

Conclusion

In conclusion, this study revealed that Summer Literacy Camp has a positive influence on students reading skills in kindergarten, first, second, and third grades. Overall, DIBELS scores indicated that 96% of students made gains in Letter Naming Fluency, 100% made gains in Phonemic Segmentation, 86% made gains in Nonsense Word Fluency, 87% made gains in Whole Words Read, 98% made gains in Oral Reading Fluency, and 98% made gains in Retell Fluency. Students who attend Summer Literacy Camp have the opportunity to gain needed reading skills to become successful readers.

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Appendices

Appendix A

Austin Peay State University

Institutional Review Board Approval

Date: February 19, 2013

RE: Study number 13-010

Dear Benita Rene' Keesler,

Thank you for your recent submission to the IRB. We appreciate your cooperation with the human research review process.


Congratulations! This is to confirm that your proposal has been approved and that your study is exempt from further review by the APIRB. Exemption from further review is granted per federal regulations **45 CFR 46.401(b), category 4:** Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the participants.

You may conduct your study as described in your application, effective immediately. A closed study report to IRB is required by February 19, 2014 or before.

Please note that any changes to the study must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. If you have any questions or require further information, you can contact me by phone (931-221-6106) or email (shepherd@apsu.edu).

Again, thank you for your cooperation with the APSU IRB and the human research review process. Best wishes for a successful study!

Sincerely,



Omie Shepherd, Chair
Austin Peay Institutional Review Board

Cc: Dr. Tammy Shutt

Appendix B

Clarksville Montgomery County Approval

Dear Dr. Armstrong:

I am pursuing an Education Specialist degree at Austin Peay State University and I am presently enrolled in Education 6050 Seminar on Research. A requirement for the degree is to conduct a study. This letter is a request for permission to conduct research using archival data from the Clarksville-Montgomery County School System.

I recently spoke to Mrs. Kennedy about this field study assignment. She brought up the fact that economically disadvantaged students are the 2nd largest gap for AMO at Barkers Mill Elementary School. We discussed intervention or strategies that may possibly help close the gap. The Summer Literacy that is held at BMES came to mind. I have participated in this program for many years. I would like to conduct research on whether Summer Literacy Camp is having an impact on student achievement as measured by DIBELS. I would like to accomplish this by comparing the DIBELS pretest and posttest data gathered from Summer Literacy Camp.

Thank you for consideration of my research proposal. I look forward to your suggestions.

Sincerely,
Benita Rene' Keesler
Kindergarten Teacher
Barkersmill Elementary
Benita.keesler@cmcss.net

Your request to conduct research is approved.

October 25, 2012

Dr. Sallie Armstrong
Director of Curriculum
Clarksville-Montgomery County School System
621 Gracey Avenue
Clarksville, TN 3040

Appendix C

Summer Literacy Camp 2012 Data

Summer Literacy Gains

Total number of students enrolled: 71
 % of students who did not complete program: 9%
 Attendance rate: 91%

Kindergarten 26 students

	LNF	PSF	NWF CLS	NWF WWR
% of students who made gains	96	100	81	77
% of students with no gain or loss	0	0	0	19
% of students who lost points	4	0	19	4

1st Grade 23 students

	NWF CLS	NWF WWR	DORF	RF
% of students who made gains	91	96	100	100
% of students with no gain or loss	0	0	0	0
% of students who lost points	9	4	0	0

2nd Grade students 15

	DORF	RF
% of students who made gains	94	94
% of students with no gain or loss	0	0
% of students who lost points	6	6

3rd Grade 7 students

	DORF	RF
% of students who made gains	100	100
% of students with no gain or loss	0	0
% of students who lost points	0	0

BMES SUMMARY	LNF	PSF	NWF CLS	NWF WWR	DORF	RF
% of students WHO MADE GAINS	96%	100%	86%	87%	98%	98%

Appendix D
DIBESL Subtest

Phonological Awareness:

LNf=Letter Naming Fluency is a 60 second snap shot of simply asking the student to name letters as fast as possible.

ISF= Initial Sound Fluency is a 60 second snap shot of a student stating the first sound in words required by the test.

PSF= Phoneme Segmentation Fluency is a 60 second snap shot of a student's ability to stretch out the sounds they hear in a word.

Alphabetic Principle and Phonics:

NWF= Nonsense Word Fluency is a 60 second snap shot of a student's ability to sound out constant, vowel, constant letters.

Fluency:

ORF= Oral Reading Fluency is a 60 second snap shot of a student's ability to read a passage with 95% accuracy.

Comprehension:

ORF and RF= Oral Reading Fluency and Retell Fluency are two 60 second snap shots of a student's ability to read and verbally connect to the text.

Vocabulary and Oral Language:

WUF= Word Use Fluency is a 60 second snap shot of a student's ability to use a random word in the best sentence possible.