

THE EFFICACY OF SCHOLASTIC'S READ 180 PROGRAM IN ONE MIDDLE SCHOOL IN  
ONE MIDDLE TENNESSEE SCHOOL SYSTEM

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The Efficacy of Scholastic's READ 180 Program in One Middle School in One Middle  
Tennessee School System

A Field Study

Presented to

The College of Graduate Studies

Austin Peay State University

In Partial Fulfillment

Of the Requirements for the Degree

Education Specialist

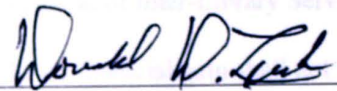
Scott Monteiro

December 2012

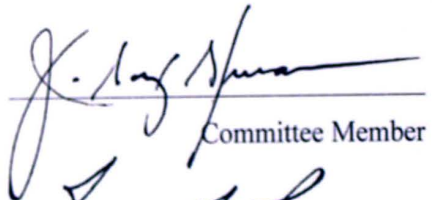
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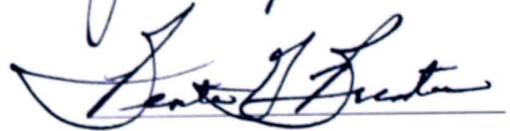
We are submitting a field study written by Scott Monteiro entitled "The Efficacy of Scholastic's READ 180 Program in One Middle School in One Middle Tennessee School System." We have examined the final copy of this field study for form and content. We recommend that it be accepted in partial fulfillment of the requirements for the degree of Educational Specialist.



Research/Committee Advisor/Chair

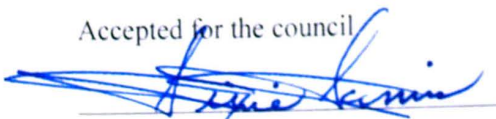


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## DEDICATION

I dedicate this field study to my wife and my children who have sacrificed throughout the years to help make this all possible. Without your continued support and prayers I do not believe I could have achieved success. You had faith in me when I had none and never allowed me to give up.

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Each of you played a pivotal role in helping me complete my study so that I can obtain my degree. Each major step would not have been accomplished without one of you there. I am eternally grateful to all of you for your time and for your sacrifices.



## ABSTRACT

SCOTT DENNIS MONTEIRO. The Efficacy of Scholastic's READ 180 Program in One Middle School in One Middle Tennessee School System (under the direction of DR. DONALD D. LUCK.)

The purpose of this study was to determine the effectiveness of the READ 180 program on participants in one metropolitan middle Tennessee school based on Normal Curve Equivalency (NCE) scores from the Reading portion of the Tennessee Comprehensive Assessment Program (TCAP). Participants were grouped based on ethnicity, socioeconomic status, grade level, and gender. A two-tailed *t*-Test was used to determine if there was any significant difference among the participants in each group. The *t*-Test was figured at the significance level of  $p < .05$ .

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## **Chapter I**

### **Introduction**

Research has shown that students' ability to read has a direct effect on their ability to be successful in school and to remain at the same level as their peers academically. When a student is unable to read at the grade level they are attending, the student begins to fall behind. Schools are being held accountable for student achievement and several states have pushed for education reforms that make the individual teacher accountable. The majority of tests that measure a student's level of proficiency are paper and pencil tests. These tests, along with their computer counterparts, require students to read at or above their current grade level. With the inception of the federal law No Child Left Behind (NCLB), schools are being held accountable for student reading proficiency levels (U.S. Department of Education, 2001). Reading intervention programs have been adopted nation wide to help bring students to the proficient level. The most widely used reading program is Read 180 (Goin, Hasselbring, & McAfee, 2009). The purpose of Read 180 is to help improve the reading level of students who read at a level lower than their peers.

The Read 180 program is marketed by Scholastic to improve the reading achievement of students reading below their grade level in the upper elementary, middle and high school grades (Goin, Hasselbring, & McAfee, 2009). According to Goin et al. (2009):

An effective reading intervention program must not only help students to develop the skills of reading, but it must also address the well documented

problems these students demonstrate with low motivation, lack of self-esteem, and lack of connection to reading materials. Additionally, an effective reading intervention program should be able to stand the test of scalability and provide an implementation model that can be delivered across a range of educational environments while producing positive results. (p. 6)

Goin et al. (2009) researched the READ 180 program to see how it addressed the issue of reading skills, scalability, and implementation. The READ 180 program does this through a series of computer programs that students use to improve their level of reading proficiency. The READ 180 program was developed over the course of ten years by researchers at Vanderbilt University in Tennessee and the Orange County Public School System in Florida. Through a prototype, more than 10,000 students took part between the years 1994 and 1999. Goin et al. (2009) found that during this time period, Orange County experienced a “dramatic and quantifiable improvement in the areas of reading achievement, overall school achievement, and student attitudes and behaviors” (p.7). With the implementation of No Child Left Behind (NCLB) in 2001, the READ 180 program was ready to meet its challenges with validity and proven reliability.

### **Statement of the Problem**

The problem researched in this study was the effectiveness of Scholastic’s READ 180 programs in one metropolitan middle Tennessee middle school. The research, in addition to overall success, examined results based on a student’s ethnicity, gender, and socioeconomic status.

There is evidence to suggest that students who are of a low socioeconomic status have a wider gap in reading achievement than their peers. There is evidence to further



suggest that a student's ethnicity and gender also plays a role in a student's reading achievement (Goin et al. 2009)

### **Purpose of the Study**

This study looked at archival Tennessee Comprehensive Assessment Program (TCAP) data that was available from one metropolitan middle Tennessee middle school. The study determined if there was a relationship between students in reading intervention programs and the efficacy of such programs on student reading achievement.

Ongoing research from Vanderbilt University on the READ 180 program provides continuous feedback on the program and its efficacy (Mayer, Alexander, Vivo, Aguhob, & Davidson, 2006). The literature that is currently available is mostly within the past decade and is therefore limited. Validity and reliability of the intervening program was established through past research from other studies.

### **Significance of the Study**

This study helps advance the study of reading intervention programs and assists school administrators in making educated decisions on what type of programs may be considered for use within their schools. Others considering researching the problem of the use of reading interventions in middle schools will be able to use this study to further their research. Researchers will be able to use the information in the study, in conjunction with the references used, to add to their research and their understanding of the problem.

### **Research Questions**

There were nine questions the researcher considered when doing the study. The researcher took into account the participants grade level, ethnicity, gender, and socio-economic status. The researcher also considered how one group that qualified for the

READ 180 program, but did not participate in the program, performed on the reading component of the Tennessee Comprehensive Assessment Program (TCAP) versus their peers who did participate in the READ 180 program. The questions were:

1. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program and those who were not?
2. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program and those who were not based on ethnicity?
3. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program and those who were not based on grade level?
4. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program and those who were not based on gender?
5. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program and those who were not based on socio-economic status?
6. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program based on ethnicity?
7. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program based on grade level?
8. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program based on gender?

9. Was there a statistically significant difference in student achievement scores between those who were in the READ 180 program based on socio-economic status?

### **Hypotheses**

1. There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program.
2. There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on ethnicity.
3. There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on grade level.
4. There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on gender.
5. There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on socio-economic-status.
6. There will be no statistically significant difference between student achievement scores of those who were in the program based on ethnicity.
7. There will be no statistically significant difference between student achievement scores of those who were in the program based on grade level.
8. There will be no statistically significant difference between student achievement scores of those who were in the program based on gender.



9. There will be no statistically significant difference between student achievement scores of those who were in the program based on socio-economic-status.

### **Limitations**

The population size in a READ 180 program made it difficult to make assumptions of the success of the program on a broader scale that goes beyond the boundaries of Middle Tennessee where this study took place. Population sizes were kept small so that students were able to receive more immediate one-on-one attention that they needed in order to be successful in the program.

The amount of data available was restricted to available data beginning with the year 2010 and ending in 2012. This data restriction was due to the re-norming of TCAP in 2009. This re-norming makes all data prior to the year 2010 inappropriate for this study.

### **Assumptions**

For the purpose of this study, it was assumed that all students in the READ 180 program successfully completed, to the best of their ability, the Tennessee Comprehensive Achievement Program test (TCAP). It was assumed that all the teachers who rotated in and out of the program over the years were certified by the state of Tennessee to teach English/Language Arts and Reading. It was further assumed that all the teachers who rotated in and out of the program were highly qualified under the standards set forth by the No Child Left Behind Act of 2001. It was assumed that all teachers had students follow the program as prescribed and assessed students through the computer programs and through all resources provided by the program.

## Definitions of Terms

1. Archival Data – data that has already been collected and stored for later access.
2. Differentiated Instruction – instructional approaches varied to meet the academic needs of diverse individual learners within a class (Maele, 2006).
3. Lexile Score – the measure of a students reading comprehension and ability (Lexile Framework for Reading, 2011).
4. Proficiency Level – the level in which a student has performed on a standardized test advanced, proficient, near proficient, below proficient, far below proficient.
5. READ 180 – a reading intervention program started by Scholastic in the mid 1980's (Mayer, Alexander, Vivo, Aguhob, & Davidson, 2006)
6. Reading Intervention – a program designed to help struggling readers improve on their comprehension of what is being read.
7. Tennessee Comprehensive Achievement Program Test (TCAP) – achievement test that determines a student's level of knowledge of core content areas providing valuable information regarding a student's progress in the state of Tennessee. (Tennessee Department of Education, 2010)

## Chapter II

### Review of Literature

#### Student Achievement and What It Is Used For

With the push for federal regulation of student and teacher accountability, the federal government has enacted several laws that have a direct impact on students, teachers, and school systems. The federally mandated No Child Left Behind Act of 2001 (NCLB) required school systems to use data to drive the curriculum and to make teachers and school systems more accountable for the data that was collected (U.S. Department of Education, 2001). The focus in education shifted to accountability in the 1980's due to concerns that the United States ability to compete in a globally economic world was being compromised by the quality of its education system (Maele, 2006).

Under the No Child Left Behind law, there are two fundamental purposes for data collection. Data is used to demonstrate accountability for results and for making instructional decisions that help increase student achievement. This data-driven decision-making provides useful information that helps school systems make knowledgeable and informed choices. According to Maele (2006), No Child Left Behind is different from previous reform movements in that it was aimed directly at the instructional core of schools. This caused the center of attention to shift from educational opportunity and equity to improved educational quality and higher achievement for all students.

No Child Left Behind has helped those who develop the curriculum in school systems know where to place their focus. In the past decade, since the inception of No Child Left Behind, reading has been at the forefront. Students who are not able to successfully read in other core academic classes, such as social studies and science, will

continue to fall behind their peers without some form of intervention. Students who have disabilities are at a greater disadvantage due to the very nature of their disability. Bryski, (2009) proposed that the difficulty of the textbook material or lesson presentations caused those with learning disabilities in reading to be at a severe disadvantage and that these students can increase their performance and understanding of reading through intentional and effective instruction. Data derived from online assessments help teachers and curriculum developers place their focus on the instruction.

### **Technology Used For Testing Students Reading Level**

With the increased use of varying technologies by school systems, it was inevitable that a new software program for struggling readers would be developed. One such program became the prototype for the Read 180 Topic Software that is used as a reading intervention program nationally. The program, called the Peabody Learning Lab, was developed by Dr. Ted Hasselbring and other members of the Cognition and Technology Group at Vanderbilt University (Mayer, et al., 2006).

The Peabody Learning Lab determined the skill level of each student individually and would then ascertain the gaps in skills. Depending on the proficiency level of the students, the software adjusts to each student and individualizes activities that promote systematic practice, review, and instruction in order to develop mastery. (p.10)

Similar assessments also determine a student's reading level and students are given a Lexile score. This score determines the reading grade level for a student and where the student should be for mastery. Lexile scores, however, do not determine the gaps in skill and instead only place the student into a determined reading grade level.



Lexile scores begin at 200 for beginning readers and go up to 1700 for advanced readers. The Lexile framework is to help students, teachers, and parents choose books that are at an appropriate level for the student. The books at the appropriate level for the reader will help the reader become proficient (Lexile Framework for Reading, 2011). When students read a book that is above their level of comprehension, the book makes little sense. Students who do not understand what they are reading become frustrated and struggle with the content. Social Studies books are usually at or above the grade level in which they are being used. Consequently, some publishers have placed their books online so that students can have the books read to them and to have pop-up dictionaries available when they do not understand a word.

Fry & Gosky (2007) stated that the use of educational technology that included dictionary components did successfully promote literacy skill development with elementary school students. Textbooks that were also placed on a CD-Rom by the publisher helped with student's level of understanding (p.172).

### **Advantages to Reading Intervention Programs**

Research shows reading intervention programs carry a statistical significance when implemented properly within the school system. Failure to implement the program as suggested could lead to lower student achievement scores which inevitably would lead to the school producing low scores holistically. Wu and Coady (2010) stated;

The Read 180 program successfully meets the needs for low and struggling readers and also met the needs to English Language Learners (ELL) also known as English as a Second Language student (ESL).

Through the Read 180 program, these students were able to better

understand the English language by echoing their immigrant experiences in the United States. (p.163)

In the Read 180 program, students might read about how other immigrants came to America and how these immigrants acclimated to life in America. The program provides a solid level of rigor and relevance for ELL/ESL students. Reading of others' struggles lead ELL/ESL students to want to read more so they understand and relate to the immigrants.

Motivation for reading for regular education students is low and this leads to lower achievement scores. Kelley and Decker (2009) reported that employers lament that high school graduates lack the skills that are necessary to be productive employees when it comes to reading. The most basic skill that high school graduates are lacking is properly filling out a job application which requires reading to successfully accomplish. Reading interventions, however, are aimed at reversing this trend and bringing reading to the forefront where students become eager to read on a daily basis and help them become well informed and productive members of society.

Another advantage of reading interventions is the implementation of policy changes throughout schools that stem from the intervention. Programs such as Read Across the Text (R.A.T.) and Read Across the Curriculum makes all teachers throughout the building reading teachers. By committing to programs such as Read Across the Curriculum, students are able to learn higher vocabulary, their grammar improves and it helps develop lifelong reading habits (Sanacore & Palumbo, 2010). Reading brings to a student positive literacy growth, the benefits of reading material across the curriculum.

A good support structure further enhances that growth through the use of reading intervention programs.

### **Disadvantages to Reading Intervention Programs**

Reading interventions, although proven to increase student proficiency, are not all-inclusive programs. No single program can work independent of itself nor can only one type of strategy be employed. Manset-Williamson, Dunn, Hinshaw & Nelson, (2008) found that the use of only text reader software did not help many students. Instead, students were found to drift off and not pay attention to the computer and others did not understand what was being read to them even if they were paying attention. It was believed by these researchers that the reader becomes bored with reading due to the monotone voice of the computer or the text reading pen. When a CD or human read the text, students were more apt to pay attention and it brought intonations that added interest and helped students better understand the text. (Manset-Williamson, et al. 2008).

Another clear disadvantage to reading intervention programs is the student's lack of motivation to read. Despite being a necessary skill in life, students are not willing to read. A phenomenon known as the "fourth-grade slump" is widely accepted by researchers as a turning point in where students lose their interest in reading and begin to fall behind in expectations on their reading ability (Kelley & Decker, 2009). It is believed that at this level, texts begin to become more difficult and the student is shifting from learning how to read to now reading texts to learn new information. (Kelley & Decker, 2009). Due to this lack of motivation, students no longer find reading enjoyable and teachers are given the task to turn that motivation around. Reading interventions, in



general, do not address at motivation, but instead focus in on a student's ability to read and comprehend what is being read.

There is no panacea for students reading below level. Some programs strictly use only one type of strategy while others use multiple types. Manset-Williamson, Dunn, Hinshaw, & Neslon (2008) reported that the use of only on type of technology is insufficient to bring students to the level of competency. Multiple strategies must be implemented in order for the intervention to work.

Limitations also exist for the individual student. Reading interventions can be modified to meet the individual educational needs of students that are in the program, but they cannot bring students to proficiency if that student has severe reading difficulties. Middle school students are the most vulnerable group to falling further behind their peers in reading ability. Some interventions only maintain the gap in reading comprehension instead of accelerating the student to closing the gap between the student with severe reading difficulties and their peers (Denton, Wexler, Vaughn, & Bryan, 2008).

### **Reading Intervention Programs**

Based on the literature that has been reviewed, several programs are available for school systems to use in regards to reading intervention. The most widely used program developed by Scholastic, Inc. is known as READ 180. This program carries a long history of success through a research group from Vanderbilt University. Hewes, Palmer, Haslam, and Mielke (2006) recently conducted a study of using the READ 180 program for a period of five years in Des Moines, Iowa. The study showed a relationship between student achievement and student participation. This proven track record makes READ 180 one of the top most widely used programs nationally.



Reading intervention programs are beginning to reach students at an earlier age than the late elementary level. The Waterford Early Reading Level One program reaches out to preschool children. Although research indicated that this program shows no statistical significance in having an effect on oral language and print language, this intervention program is still used and it does present preschool students with the beginning foundation for solid reading habits (Waterford Early Reading Level One, July 2007). Technology has allowed programs such as The Waterford Early Reading Level One Program to be easier to implement and to track student success.

The state of Michigan uses a software program that enhances the item analysis in tests and gives researchers a model by which they can determine if the reading items are being understood through cognitive processes. This reading model shows where students understand certain test questions and how difficult were the questions in regards to the student's ability to read and their cognitive level of function (Gao & Rodgers, 2010). In essence, the software determines if the student was able to understand the questions presented or not. Other forms of intervention use programs where the students are read to.

In years past, a form of reading intervention was for a text book to be placed on a cassette tape which the student would play back while reading. Another form was for another person to read the text to them. Students who have a reading disability (RD) are more exposed to this type of intervention than others. However, with software that is now widely available, the text that is being read on a computer can be read aloud and highlighted on the computer. Additionally, several options are made available to the reader such as a dictionary, to add or remove a voice reading the text back, and to take notes as the reader moves forward through the text (Manset-Williamson, Dunn, Hinshaw

& Nelson, 2008). Text readers are also available in the form of a stylus pen. The user drags the pen across the words of the page and the pen reads the words back to the user. Interventions such as this are for older students that are in grade levels at or above the middle school level. Manset-Williamson et al. (2008) found that the disadvantage to using this type of technology is the student may show an increase in word recognition, but it does not necessarily increase the students' general reading comprehension ability.

Manset – Williamson et al. (2008) discussed several options for reading intervention strategies that go beyond using technology. Research shows comprehension strategy instruction can be effective for students with a reading disability. According to Manset – Williamson et al. (2008):

Comprehension strategy instruction designed for students with reading disorder typically includes pre-reading, during reading, and post reading activities designed to mimic the metacognitive and cognitive strategies used by good readers. Depending on the strategic approach, students are generally asked to use their prior knowledge of the topic and clues in the text (i.e pictures, headers) to predict what may happen in the upcoming narrative and to summarize structural features (i.e. main characters, the problem, how the problem is resolved). (p126)

The self-questioning strategy is another intervention that is highly effective during reading. This strategy is particularly effective with students who have a reading disability. Self-questioning embodies all other comprehension strategies. The reader uses clues from the topic sentence of the paragraph and their prior knowledge of the topic in order to predict what may happen in the paragraph. The reader is engaged and attempts to

determine whether the prediction of the text took place or not. However, Manset – Williamson et al. (2008) stated that “The barriers researchers and teachers face when teaching comprehension strategies to students who have significant delays with both word identification and comprehension is that students cannot access the text in order to apply comprehension strategies”(p.124).

In earlier research conducted by Pearson, Ferdig, Blomeyer & Moran (2005), an evolving relationship between literacy and technology was found to be prominent. According to this research, technology is used in many ways to help students decode information that they see and read on a daily basis. Software tools such as Inspiration and Microsoft PowerPoint give students the opportunity to create concept maps and Venn diagrams to organize their ideas and their understanding of what they just read.

NCLB has placed a stronger focus on reading literacy and the use of interventions. Students who are not making adequate progress in middle school must be offered research based intervention to accelerate their learning and to bring them current with their peers. Because students rely heavily on the internet as their place of sources and their primary textbook, it is only natural for there to be a stronger focus on the use of technology that present students with relevance (Pearson et al. 2005). The READ 180 program takes advantage of the students’ knowledge of computers and puts it to use. READ 180 monitors a student’s progress and will test the student at certain levels to ascertain the student’s understanding of the material that has been presented to that point. Studies involving READ 180 are wide spread and show continuous growth for students who are in the program when implemented properly (READ 180, 2009 October).



A disadvantage to the READ 180 program is its limitations on the grade levels where it has proven to be effective.

### **Reading mastery program**

For beginning readers, the Reading Mastery Program is used. This program uses three different levels for students. Reading Mastery Classic is for us in grades Pre-Kindergarten to third grade and is used to help early readers identify sounds, letters, and develop vocabulary. Reading Mastery Plus is for Kindergarten through sixth grade and places a stronger emphasis on language arts in general including reading, writing, and spelling. Finally there is Reading Mastery Signature Edition for grades Kindergarten through fifth. This edition focuses in on phonics, word analysis vocabulary and comprehension to name a few (READ 180, 2010 July).

The federal government has placed a stronger emphasis on accountability for student tests scores throughout the nation for well over a decade now. Federal funding is attached to schools and whether or not they obtain adequate yearly progress (AYP). The attention is focused more on schools with lower scores than schools that consistently maintain high scores. Schools that successfully meet AYP annually can easily disguise any inadequacies in reading. Lower performing schools, however, must intervene in reading and do all that is possible to raise scores.

### **READ 180**

The READ 180 program uses multiple strategies by employing several at the same time. The READ 180 program has students work in sessions. These sessions typically begin and end with whole group instruction. During the sessions, students move at pre-designated times to stations where the student completes a certain task. Each



station has the student either reading quietly in a paperback book, reading on the computer using a software program, using audio books on CD for modeled reading, or taking short tests to see how the student has progressed in the program (U.S. Department of Education, 2010).

Scholastic's READ 180 program clearly looks at the differences in the types of children and research on the program has provided the program with validity and proven accountability. Research does not, however, offer an insight into the general makeup of the student bodies that the READ 180 program addresses. Things that have not been addressed in the literature include student socio-economic-status (SES), race, or the school environment. Chudowsky and Chudowsky (2010) conducted a study that looked at states in general and looked at state overall scores.

In the broad sense, test scores have increased in reading significantly in most states since 2005 (Chudowsky & Chudowsky, 2010). States had a continuous trend of increased scores and almost half of all states showed an increase on the National Assessment of Educational Progress (NAEP). The NAEP is a federally funded test that is administered periodically to small samples of students from each state to represent the nation as a whole, to determine trends in test scores for states and for the nation (Chudowsky & Chudowsky, 2010). With high stakes testing being conducted, the NAEP still does not address the need to look closer at the student body and take into account many differing factors.

A limitation to the literature that has been reviewed is seen at the complexity that each researcher looked at reading programs. Causal-comparative research was conducted in most cases and no comparisons were placed against other intervention programs. The

purpose behind the research was to discover if the interventions that were in place and being used were effective to the point of continuation of the program at the school and to determine if modifications to the intervention program was needed.

Bryski (2009) did note that students who lack a positive learning environment at home may find it difficult to develop good reading skills in the classroom. Additionally, the researcher also indicated that students who come from low-income housing may have little focus on education and reading. This prevents the students from developing the necessary skills required to do well in school.

## **CHAPTER III**

### **Research Design**

This study was a quasi-experimental study using archival data with the intent to find if READ 180 has an effect on student achievement. This study will be useful in determining if the reading intervention program that has been implemented is successful.

The independent variable in the first part is student participation in READ 180. The dependent variable is student TCAP scores. The study also examines the dependent variable TCAP scores and independent variables of gender, ethnicity, and socio-economic states of those in READ 180.

### **Population and Participants**

The population in this study was 68 middle school students in a metropolitan middle Tennessee school. The population included both genders and involved majority and minority populations. The population was highly transient; therefore, students who were not enrolled within the school for two consecutive years were excluded.

The participants were all students in grades seven and eight who have been enrolled at a mid-south middle school reading intervention program for at least two consecutive years. Participants included both genders, both majority and minority populations, and students with a high and low socio economic status (SES).

### **Instrument**

The researcher utilized data from the Language Arts section of the Tennessee Comprehensive Assessment Program (TCAP). The researcher analyzed the Normal Curve Equivalency (NCE) scores for students that completed the TCAP in 2011 and 2012. The NCE scores were compared based on gains between the 2011 and 2012 testing

years. The researcher was unable to use scores prior to these years due to the NCE being re-normed making all scores prior to 2011 invalid.

### **Data Collection Procedures**

Permission was sought and granted from Austin Peay State University (APSU) Institutional Review Board and the Clarksville Montgomery County School System. Permission was granted and the researcher was given the data from an individual who had legal access to all district data. The data was provided to the researcher with all names and personally identifiable information removed to ensure anonymity. The data was entered into an Excel spreadsheet program for analysis of data at the  $p < .05$  level.

### **Data Analysis Plan**

All data collected was entered into an Excel spreadsheet for analysis. The Excel software program built a report that showed the final findings of either accepting or rejecting the null. The researcher used a paired, two-tailed  $t$ -Test to compare the impact of the READ 180 program between students who were in the program and students who were not in the program based on ethnicity, grade level, gender, socio-economic status and overall. The researcher also used a paired, two-tailed  $t$ -Test to compare the impact of the READ 180 program between students who were in the program based on ethnicity, grade level, gender, and socio-economic status. The  $t$ -Tests were calculated at the  $< .05$  level of significance.



## CHAPTER IV

### Presentation and Analysis of Findings

#### Introduction

This study was conducted with 68 participants. There were 34 participants who were eligible but were not the READ 180 program and 34 students who were in the program. Table 1 shows the demographic information for the participants in this study.

Table 1.

#### *Demographic Information*

Group	Gender	N
Total	Male	30
	Female	38
Ethnicity Minority	Male	22
	Female	19
Ethnicity Majority	Male	8
	Female	19
Seventh Grade	Male	16
	Female	20
Eighth Grade	Male	14
	Female	18
Economically Disadvantaged	Male	20
	Female	19
Not Economically Disadvantaged	Male	10
	Female	19

There were 68 participants in the study with 30 males and 38 females. Of the 68 participants, 41 were minorities and 27 were majorities. Also, 36 participants were in the seventh grade and 32 were in the eighth grade, 39 were classified as economically disadvantaged and 29 were classified as not economically disadvantaged. All 68 participants took and completed the TCAP test during the school years of 2011 and 2012. The gain between each year was used by looking at the NCE score from one year to the next with each participant.

### **Analysis of Findings**

The researcher used Microsoft Excel to analyze the data and created a spreadsheet to calculate a paired, two-tailed *t*-Test at the  $p < 0.5$  level to test each hypotheses.

### **Hypothesis 1**

There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program.

The research utilized the participant's NCE scores from the TCAP test that was administered in 2011 and again in 2012. The researcher conducted a two-tailed, paired *t*-test at the  $p < .05$  level to test the NCE scores between the two groups. The *t*-Test yielded a result of 0.5788 leading the researcher to accept the null hypothesis. Table 2 illustrates these results.

Table 2.

*Overall TCAP Score Comparison of READ 180 Participants vs. Non-Participants*

Overall	N	Mean	Standard Deviation	p-Value
In the program	34	2.2941	13.74	0.5788
Not in the program	34	4.1176	12.799	

\* Significant at  $p < .05$

There was no statistically significant difference between students who were in the program and students who were not in the program.

## Hypothesis 2

There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on ethnicity.

The researcher utilized a two-tailed  $t$ -Test at  $p < .05$  to determine if there was a significant difference between ethnicities. After running the  $t$ -Test for the minority ethnicity, the researcher found the  $p = 0.7484$ . Furthermore, the  $t$ -Test for the majority ethnicity yielded a result of  $p = 0.2892$ . These results lead the research to retain the null hypothesis. Table 3 below shows the results of the test.

Table 3.

*TCAP Comparison of READ 180 Participants vs. Non-Participants by Ethnicity*

Ethnicity	N	Mean	SD	p-Value
Minority not in program	16	5.2683	12.858	0.748385
Minority in program	25	4.72	12.223	
Majority not in program	18	0.0741	13.372	0.289196
Majority in program	9	-4.444	15.378	

\* Significant at  $p < .05$

There was no statistically significant difference between the two groups. The researcher retained the null hypothesis.

### Hypothesis 3

There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on grade level.

The *t*-Test was run at a significant level of  $p < .05$ . The test yielded results of 0.7381 for the seventh grade was and 0.5725 for the eighth grade. The results of the *t*-Test lead the researcher to retain the null hypothesis. Table 4 displays the results of the *t*-Test.



Table 4.

*TCAP Comparison of READ 180 Participants vs. Non-Participants by Grade*

Grade Level	N	Mean	SD	p-Value
7 <sup>th</sup> – not in program	18	-0.7778	12.512	0.738143
7 <sup>th</sup> – in program	18	-3.3889	13.462	
8 <sup>th</sup> – not in program	16	9.6129	10.855	0.572454
8 <sup>th</sup> – in program	16	8.6875	10.959	

\* Significant at  $p < .05$

There was no statistically significant difference between the seventh graders or the eighth graders. This lead the researcher to retain the null hypothesis.

#### Hypothesis 4

There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on gender.

The researcher considered the males first. The researcher used a two-tailed *t*-Test to determine the P value at a significance of  $p < .05$ . The tests results showed a P value at 0.3663 leading the researcher to retain the null hypothesis.

The tests results for the females showed a P value at 0.9912 leading the researcher to retain the null hypothesis. Table 5 shows the results of the *t*-Test below.

Table 5.

*TCAP Comparison of READ 180 Participants vs. Non-Participants by Gender*

Gender	N	Mean	SD	P – Value
Males – in program	15	3.0667	13.626	0.3663
Males – not in program	15	5.1	11.867	
Females – in program	19	1.6842	13.8	0.9912
Females – not in program	19	1.7105	14.168	

\* Significant at  $p < .05$

### Hypothesis 5

There will be no statistically significant difference between student achievement scores of those who were in the program and those who were not in the program based on socio-economic-status.

Participant socio-economic status was determined by looking at those who were classified as Economically Disadvantaged (ED) and those who were classified as Non-Economically Disadvantaged. The researcher first considered participants who were classified as Non-Economically Disadvantaged. The researcher utilized a two-tailed *t*-Test to determine the P value at a significance of  $p < .05$ . The tests results showed a P value at 0.0073 leading the researcher to reject the null hypothesis.

After running the *t*-Test for those classified as ED, the researcher found the  $p = 0.2804$ . These results lead the research to retain the null hypothesis. Table 6.1 and 6.2 below shows the results of the test.

Table 6.

*TCAP Comparison of READ 180 Participants vs. Non-Participants by Socio-Economic Status*

Status	N	Mean	SD	P – Value
Not ED In the program	15	-3.6	10.307	0.0073*
Not ED Not in the program	14	1.7241	11.323	
ED in the program	19	6.9474	14.314	0.2804
ED Not in program	20	4.3077	14.515	

\* Significant at  $p < .05$

There was a statistically significant difference between the participant who was identified as Not ED and in the program and Not Ed and not in the program. There was no statistically significant difference between those who were identified as ED and in the program and those identified as ED and not in the program.

### Hypothesis 6

There will be no statistically significant difference between student achievement scores of those who were in the program based on ethnicity.

There was no statistically significant difference between ethnic groups following the running of the *t*-Test. The minority group performed better on the TCAP Reading Language Arts section, but the results show they did not perform significantly better.

Using Normal Curve Equivalency scores (NCE), the researcher looked at those who were in the READ 180 program and compared scores based on ethnicity. The researcher conducted a two-tailed, paired  $t$ -test at the  $p < .05$  level to test the NCE scores between the two groups. The  $t$ -Test yielded a result of 0.1524 leading the researcher to retain the null hypothesis. Table 7 illustrates these results.

Table 7.

*TCAP Comparison of READ 180 Participants by Ethnicity*

Ethnicity	N	Mean	SD	P-Value
Majority	9	-4.444	15.378	0.1524
Minority	25	4.72	12.223	

\* Significant at  $p < .05$

### Hypothesis 7

There will be no statistically significant difference between student achievement scores of those who were in the program based on grade level.

The results for comparing grade levels seventh and eighth showed a statistically significant difference between the two groups. The eighth grade performed significantly better on the TCAP than the seventh grade.

The paired, two-tailed,  $t$ -Test yielded results of 0.0087. The results led the researcher to reject the null hypothesis. Table 8 below displays these results.



Table 8.

*TCAP Comparison of READ 180 Participants by Grade*

Grade Level	N	Mean	SD	P-Value
7 <sup>th</sup> grade	18	-3.3889	13.462	0.0087*
8 <sup>th</sup> grade	16	8.6875	10.595	

\*Significant at  $p < .05$

Data shows a significant difference between grades seven and eighth when comparing participants who were in the program. This significance led the researcher to reject the null-hypothesis.

### Hypothesis 8

There will be no statistically significant difference between student achievement scores of those who were in the program based on gender.

Gender did not have any statistically significant impact on the participants who were in the program. Each group performed equally on the Reading Language Arts portion of the TCAP.

The *t*-Test was run at a significant level of  $p < .05$ . The test yielded results of 0.779. The results of the *t*-Test lead the researcher to retain the null hypothesis. Table 9 displays the results of the *t*-Test.

Table 9.

*TCAP Comparison of READ 180 Participants by gender.*

Gender	N	Mean	SD	P-Value
Male	15	3.0667	13.626	0.779
Female	19	1.6842	13.8	

\* Significant at  $p < .05$

There was no statistically significant difference found when comparing participants based on gender that was in the READ 180 program.

### **Hypothesis 9**

There will be no statistically significant difference between student achievement scores of those who were in the program based on socio-economic-status.

There was a statistically significant difference between participants who were identified as ED and those who were identified as Not-ED. Participants classified as ED performed significantly better on the TCAP than those who were classified as Not-ED.

The researcher performed a two-tailed  $t$ -Test at the  $p < .05$ . The results of the test yielded 0.0213 so the researcher rejected the null hypothesis. It is notable that the participants who were classified as Economically Disadvantaged (ED) out-performed those who were classified as Not-ED. Table 10 below displays these results.

Table 10.

*TCAP Comparison of READ 180 Participants by Socio-Economic Status*

Status	N	Mean	SD	P-Value
ED	19	6.9474	14.314	0.0213*
Not-ED	15	-3.6	10.307	

\*Significant at  $p < .05$

There was a significant difference between participants who were in the READ 180 program when comparing Economically Disadvantaged (ED) to Not-Economically Disadvantaged (Not-ED). These findings lead the research to reject the null hypothesis.

### Summary

The analysis of the READ 180 program at this one middle school in one Middle Tennessee school system shows a statistically significant difference between those identified as ED and participants identified as Not-ED. In each case, participants who were identified as ED performed better on the Reading Language Arts portion of the TCAP than those identified as Not-ED. Tables 6.1 and 10.1 support this claim.

Overall analysis between participants who were in the program and participants who were not in the program yielded no statistically significant difference. The program also showed negative gains for the seventh grade and also for the Majority Ethnic group. Participants who were not in the program in the seventh grade out-performed their peers who were in the program. The greatest gains that were noticeable were with the participants who were classified as Economically Disadvantaged. These gains were

between both groups. The greatest negative impact of the READ 180 program was Majority Ethnic group with a Mean gain of -4.444. It is notable that this negative Mean gain was also the greatest among all other participant groups.



## CHAPTER V

### Summary, Conclusions, and Recommendations

#### Summary of the Study

The purpose of this study was to determine the effectiveness of the READ 180 program on participants in one metropolitan middle Tennessee school based on Normal Curve Equivalency (NCE) scores from the Reading portion of the Tennessee Comprehensive Assessment Program (TCAP). Participants who were in the program were compared with peer participants who qualified for the program but did not participate. Those who participated in the program were also compared within the group. Participants were grouped based on ethnicity, socio-economic status, grade level, and gender. Data were entered put into an Excel spreadsheet for analysis. A two-tailed *t*-Test was used to determine if there was a significant difference among the participants in each group. The *t*-Test was calculated at the significance level of  $p < .05$ .

The sample size for this study was 68 seventh and eighth graders. There were 34 participants who were in the program and there were 34 participants who were not in the program but did qualify.

#### Conclusions

When comparing those who were in the READ 180 program with those who were eligible but were not in the program, the researcher found there to be no statistically significant difference between the groups. It is notable that those who were not in the READ 180 program posted greater gains on their NCE scores than those who were in READ 180.

The renorming of the TCAP test in 2009 limited the data to the previous two years. Because of this, the research is limited to a brief snap-shot view into the program at this one metropolitan middle school in middle Tennessee. This brief snap-shot view does show the READ 180 program has had no statistically significant impact on the students at this one metropolitan middle Tennessee school.

When looking at participants in the seventh grade, overall gains dropped for both those in the program and for those who were not in the program. However, the overall Mean gain for participants who were in the program was down -3.3889 while the overall Mean gain for participants who were not in the program was down -0.7778. This differential could be attributed to scores for both groups containing participants whose NCE scores dropped precipitously from one year to the next. This drop was only seen for participants who were in the seventh grade.

The READ 180 program showed no statistically significant impact on students based on gender, grade level, or participants who were classified as Economically Disadvantaged (ED). It is interesting to note that participants who were ED posted significant gains over those who were classified as Not-Economically Disadvantaged (Not-ED). Participants classified as Not-ED and in the program posted a Mean gain of -3.6 while their peers posted a positive Mean gain of 6.9474. The discrepancy between the two gains could be attributed to attitudes about the READ 180 program and how students felt about being assigned to the program.

The results reflected in table 3 indicate a decline in the Mean gain for majority ethnicity for those who were in the program when compared to those who were not in the program. The mean for this group shows a negative Mean. The Mean and Standard

Deviation for the minority ethnicity remained fairly consistent between those who were in the program and those who were not.

When comparing those classified as Not-ED in the program with those Not-Ed and not in the program, there was a statistically significant difference between the two groups. A two-tailed *t*-Test was conducted at the  $p < .05$  significant level. When comparing the two groups the *p*-Value was less than .05. The significant difference could be attributed to the participants' attitudes. Participants may have viewed the program negatively and not gained from the program. In these respect participants who were classified as Not-ED may have also been placed inappropriately.

Participants who were in the program were grouped by grade level and a two-tailed *t*-Test was used to calculate at the significant level of  $p < .05$ . The researcher found the *p*-Value to be significant at the  $< .05$  level. The seventh grade posted a Mean gain of -3.3889 and the eighth grade posted a Mean gain of 8.6875. The glaring disparities between the two groups may be attributed to three scores that were outliers in the seventh grade. These outliers were not removed from the study and were more than two standard deviations away from the Mean.

Hypothesis nine also showed a statistically significant difference between those who classified as ED in the program and those who were Not-ED and in the program. The researcher found the *p* value statistically significant at the  $< .05$  level. Participants classified as ED out-performed those classified as Not-ED by posting a Mean gain of 6.9474 while their peers posted a Mean gain of -3.6.

Hypothesis five and nine support each other when identifying a noteworthy difference between the two groups. This leads the researcher to believe that the READ



180 program may actually hurt participants who are identified as Not-ED and are still placed into the program. Participants who are placed into this program may view the placement as a negative moniker. Their attitudes and perception of the program can then inhibit their potential to improve in the program.

### **Recommendations**

The sample size must be taken into consideration when reviewing this research. The researcher utilized only 68 participants. It would be beneficial to conduct a larger study to determine the overall effects of the READ 180 program on students. The sample size of the study makes it difficult to determine if the overall negative impact of the READ 180 program was due to student attitudes about the program or if the program was the cause. The READ 180 program should not be considered the sole reason for the decline in student TCAP NCE scores.

Further consideration should be given to outliers within the program. The researcher did not remove any outliers due to not finding suitable replacements. Participants were randomly selected and the researcher was only giving data for those participants that were chosen. Further studies should include the possibility of outliers and remove/replace them as necessary.

The researcher only considered scores from two years following the renorming of the TCAP NCE scores for the Reading/Language Arts portion of the test. A more in-depth longitudinal study over several years should be conducted when there is sufficient data available. It is recommended the study should be conducted with a minimum of five years of data. It is also recommended the sample size be increased.



Only TCAP NCE scores were used in drawing a conclusion about the effectiveness of the READ 180 program in this one metropolitan middle Tennessee school. Further data analysis should include Lexile scores. Students have significant gains in Lexile scores, but these scores were not considered in this study. Students are frequently removed from the program early by posting significant gains in Lexile scores. It is the recommendation of this researcher that students should remain in the program for up to three years and show gains in Lexile scores and TCAP NCE scores. Additionally, by remaining in the program for three years, students can demonstrate their ability to maintain gains made in their score

For this study, it was assumed teachers who taught the READ 180 program were highly qualified according to the standards set forth by the No Child Left Behind Act (NCLB) of 2001. It was also assumed teachers who taught the READ 180 program were trained in the use of the program and had a clear understanding of how the computer programs work. It was assumed teachers teaching the READ 180 program attended professional development classes to further educate themselves on the program and the implementation of the program. It was further assumed teachers teaching the READ 180 program were following the strict curriculum presented by the program while also meeting the core requirements of state standards. The researcher did not consider teacher effectiveness or the possibility that the strict regimen of the READ 180 program may not be aligned with state standards that are tested on the TCAP. Further research into determining if there is a misalignment should be conducted to ensure the accuracy of the TCAP NCE scores and READ 180 participation.

Student attitudes about participating in the READ 180 program were not taken into consideration in this study. Negative attitudes towards placement in a program could have an adverse effect on student performance and could therefore effect students overall grade on the TCAP. Poor student attitudes may negatively impact the program. Negative labels concerning the program may have a detrimental effect on student performance. Positive, focused attention by the administration of the school to increase awareness of the program may improve the understanding of the purpose of the program and how all students can benefit from the program.

Further studies need to be conducted in the attitudes of students who are identified as Not-Ed and placed into the program. The study should include a large number of participants and should be longitudinal. The attitudes and the negative connotation of the program appear to have a negative result on these students. Further studies would help others in making informed decisions on placing these students into the program. It would be advantageous to determine if the programs negative stigma can be turned around or can be changed so that students would want to be in the program. It would also help to study the impacts the material has on the students that are classified as Not-Ed and are of majority ethnicity. The material should be relatable to the student.

## References

- Bryski, C. (2009). Increasing the social studies reading comprehension of middle school students with learning disabilities. *Action research project, Western Governors University*. Retrieved from <http://web.ebscohost.com.ezproxy.lib.apsu.edu/ehost/detail?vid=10&hid=9&sid=9143fb4709a84c0f88d57b6da4564994%40sessionmgr12&bdata=JnNpdGU9ZW9vc3QtbGl2ZSZzY29wZT1zaXRl#db=eric&AN=ED506767>
- Chudowsky, N. & Chudowsky, V. (2010). State test score trends through 2008-09, part 1, rising scores on state tests and NAEP. Retrieved from <http://web.ebscohost.com.ezproxy.lib.apsu.edu/ehost/detail?vid=9&hid=9&sid=71b629282fcc4b32a535816f5abfb3bc%40sessionmgr13&bdata=JnNpdGU9ZW9vc3QtbGl2ZSZzY29wZT1zaXRl#db=eric&AN=ED513962>
- Denton, C. A., Wexler, J., Vaugh, S., & Bryan, D. (2008). Intervention provided to linguistically diverse middle school students with severe reading difficulties. *Learning Disabilities Research & Practice Report*, 23(2), 79-89. Retrieved from <http://web.ebscohost.com.ezproxy.lib.apsu.edu/ehost/detail?vid=11&hid=9&sid=71b629282fcc4b32a535816f5abfb3bc%40sessionmgr13&bdata=JnNpdGU9ZW9vc3QtbGl2ZSZzY29wZT1zaXRl#db=eric&AN=EJ790878>
- Fry, S. W., & Gosky R. (2007). Supporting social studies reading comprehension with an electronic pop-up dictionary. *Journal of Research on Technology in Education*. Retrieved from <http://www.eric.ed.gov/PDFS/EJ826071.pdf>
- Gao, L. & Rogers, W.T. (2010). Use of tree-based regression in the analysis of L2 reading test items. *Language Testing*. doi:10.1177/0265532210364380



- Goin, L., Hasselbring, T. McAfee, I. (2009). *DoDEA/Scholastic READ 180 project: An evaluation of the READ 180 intervention program for struggling readers*. DOD contract MDA410-98-R-0009. Retrieved from [http://teacher.sholastic.com/products/research/pdfs/r180\\_deptofdefense.pdf](http://teacher.sholastic.com/products/research/pdfs/r180_deptofdefense.pdf)
- Hewes, G. M., Palmer, N., Haslam, M. B. & Mielke, M. B. (2006). Five years of READ 180 in Des Moines: improving literacy among middle school and high school special education students. *Research project*. Retrieved from [http://teacher.sholastic.com/products/read180/pdfs/sr\\_des-moines-5-year\\_IA\\_full\\_june\\_06.pdf](http://teacher.sholastic.com/products/read180/pdfs/sr_des-moines-5-year_IA_full_june_06.pdf)
- Kelley, M. J., & Decker, E.O. (2009). The current state of motivation to read among middle school students. *Reading Psychology*, 30, 466-485.  
doi:10.1080/02702710902733535
- Lexile Framework for Reading (2011). What is a lexile measure? Retrieved from <http://lexile.com/about-lexile/lexile-overview/>
- Maele, D. (2006). *Data use by teachers in high-performing, suburban middle schools to improve reading achievement of low-performing students*. (Doctoral dissertation). Retrieved from <http://search.proquest.com.ezproxy.lib.apsu.edu/pqdtft/docview/304822455/fulltextPDF/12DD38ECE67688B1396/12?accountid=8437>
- Manset-Williamson, G., Dunn, M., Hinshaw, R., & Nelson, J.M. (2008). The impact of self-questioning strategy use on the text reader assisted comprehension of students with reading disabilities. *International Journal of Special Education*, 23(1), 123-135. Retrieved from <http://www.eric.ed.gov/PDFS/EJ814382.pdf>



- Mayer, M., Alexander, F., Vivo, K.D., Aguhob, & M., Davidson, J. (2006). A heritage of research: READ 180. Retrieved from [http://teacher.scholastic.com/products/read180/research/pdfs/heritage\\_of\\_research\\_EE.pdf](http://teacher.scholastic.com/products/read180/research/pdfs/heritage_of_research_EE.pdf)
- Pearson, P.D., Ferdig, R.E., Blomeyer R.L. & Moran, J. (2005). The effects of technology on reading performance in the middle school grades: A meta analysis with recommendations for policy. *Learning Point Associates Report* ED-01-CO-0011. Retrieved from <http://www.eric.ed.gov/PDFS/ED489534.pdf>
- READ 180. (2009 October). What Works Clearinghouse. U.S. Department of Education. *Institution of Education Sciences*. Retrieved from <http://www.eric.ed.gov/PDFS/ED506775.pdf>
- READ 180. (2010 July). What Works Clearinghouse. U.S. Department of Education. *Institution of Education Sciences*. Retrieved from <http://www.eric.ed.gov/PDFS/ED510852.pdf>
- Reading Mastery. (2010 August). What Works Clearinghouse. U.S. Department of Education. *Institution of Education Sciences*. Retrieved from <http://www.eric.ed.gov/PDFS/ED511269.pdf>
- Sanacore, J. & Palumbo, A. (2010). Middle school students need more opportunities to read across the curriculum. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(5), 180-185.  
doi:10.1080/00098650903583735
- Tennessee Department of Education. (2010). What is the TCAP achievement test? Retrieved from [http://www.tn.gov/education/assessment/ach\\_faq.shtml](http://www.tn.gov/education/assessment/ach_faq.shtml)

U. S. Department of Education. (2001). *PL 107 – 110, The No Child Left Behind Act of 2001*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>

Waterford Early Reading Level One (2007 July 30). What Works Clearinghouse.

U.S. Department of Education. *Institution of Education Sciences*. Retrieved from <http://www.eric.ed.gov/PDFS/ED497611.pdf>

Wu, C. & Coady, M. R. (2010). The United States is America?: a cultural perspective on READ 180 materials. *Language, Culture and Curriculum*, 23(2), 153-165. Retrieved from <http://web.ebscohost.com.ezproxy.lib.apsu.edu/ehost/detail?vid=3&hid=9&sid=dda0d51b687747a7ab75abf17bbcdde7%40sessionmgr15&bdata=JnNpdGU9ZWwhvc3QtbGl2ZSZzY29wZT1zaXRl#db=ufh&AN=52063>

## Appendices

## Appendix A

## Austin Peay State University Institutional Review Board Approval



February 23, 2012

RE: Your application regarding study number 12-012: A comparison of Student Achievement in READ 180 as measured by Tennessee Comprehensive Assessment Program and Scholastic Reading Inventory assessment scores.

Dear Mr. Monteiro

Thank you for your recent submission. We appreciate your cooperation with the human research review process. Your study has been reviewed on an expedited basis and we are pleased to inform you that your study has been approved pending the following modifications.

- #2 There is extensive research on the READ 180 Program. The IRB requests that you briefly address some of the results of those studies as requested in this section.
- #3 Data is described as archival with no reference to student names; however, the PI does not state if the data is publically accessible.

This approval is subject to APSU Policies and Procedures governing human subject research. The full IRB may still review this protocol and reserves the right to withdraw expedited approval if unresolved issues are raised during their review.

Once you have provided documentation to the IRB that the modifications have been made and you have received a letter of acceptance, you are free to conduct your study. Your study is subject to continuing review on or before February 23, 2013, unless closed before that date. Enclosed please find the forms to report when your study has been completed and the form to request an annual review of continuing study. Please submit the appropriate form prior to February 23, 2013.

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 (931-221-7467) or email ([davenportd@apsu.edu](mailto:davenportd@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,

  
Doris Davenport, Chair  
Austin Peay Institutional Review Board

Cc: Dr. Gary Stewart, Faculty Supervisor

## Appendix B

### Austin Peay State University Institutional Review Board Approval

#### Approval Provided After Requested Revisions

May 19, 2012

RE: Study number 12-012: A Comparison of Student Achievement in REAFD 180 as measured by Tennessee Comprehensive Assessment Program and Scholastic Reading Inventory assessment scores.

Dear Mr. Monteiro,

Thank you for your recent submission of requested revisions. We appreciate your cooperation with the human research review process.

This is to confirm that revisions for Study # 12-012 have been approved. This approval is subject to APSU Policies and Procedures governing human subject research. The full IRB may still review this protocol and reserves the right to withdraw approval if unresolved issues are raised during the review.

Your study remains subject to continuing review on or before February 23<sup>rd</sup> 2013, unless closed before that date. Please submit the appropriate form prior to February 23<sup>rd</sup> 2013.

Please note that any further 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 (931-221-7467) or email ([davenportd@apsu.edu](mailto:davenportd@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,



Doris Davenport, Chair  
Austin Peay Institutional Review Board

Cc: Dr. Gary Stewart, Faculty Supervisor

# Appendix C

## Clarksville-Montgomery County School System Letter of Approval for Study

Clarksville-Montgomery County School System  
1000 Clarksville Road  
Clarksville, Tennessee 37040  
www.clarksville.k12.tn.us

...and research on the efficacy of the





Sallie Armstrong, Ed.D.  
Curriculum & Instruction Director

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Board of Education      621 Gracey Avenue      Clarksville, Tennessee 37040  
931-920-7819      Fax: 931-920-9819      email: [sallie.armstrong@cmcss.net](mailto:sallie.armstrong@cmcss.net)

January 31, 2012

Dear Scott,

The Research Committee met and approved your request to conduct research on the efficacy of the READ 180 Program.

Sincerely,

A handwritten signature in black ink that reads "Sallie Armstrong". The signature is fluid and cursive, with a large, stylized "S" at the beginning.

Sallie Armstrong, Ed.D.

Director of Instruction & Curriculum