The Effect of Teaching Phonics and Phonemic Awareness Training

to

Adolescent Struggling Readers

by

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Abstract

The purpose of this study was to determine the efficacy of teaching phonics and phonemic awareness training to adolescent struggling readers. The measurement tool was the Scholastic Reading Inventory (SRI). This study involved the use of a pretest/posttest design to compare data prior to the implementation of the reading intervention, *System 44*, to data after the intervention was complete (one to two years). Achievement gains were not significant, though results could be attributable to a number of intervening factors. Research in the area of high school reading remediation should continue given the continued disagreement over best practices and the new standards that must be met per the Common Core.

CHAPTER I

INTRODUCTION

Advanced or proficient reading abilities are one of the primary yet essential skills that should be mastered by every student. According to the National Assessment of Educational Progress, (as cited in Guensburg, 2006) "more than 8 million U.S. students in grades 4–12 struggle to read, write, and comprehend adequately" (p. 1). Without mastery in this skill, students continue to not only struggle throughout their school age years, but well into their higher level of education and career field. This impairment in reading can lead to students falling further and further behind and ultimately resulting in a higher risk of dropping out of school all together.

There are many contributors that have resulted in low reading scores in the high school setting. Statistically, "children who have lived in poverty and are not reading proficiently in third grade are about three times more likely to dropout or fail to graduate from high school than those who have never been poor" (Hernandez & Casey, 2011, p. 8). Children of poverty come from families who "often lack resources for decent housing, food, clothing, and books, and they often do not have access to high quality child care and early education or to health care" (Hernandez & Casey, 2011, p. 8). "They also are more likely to live in neighborhoods with low-performing schools" (Hernandez & Casey, 2011, p. 8).

Many adolescent struggling readers do not possess mastery in the basic elements of reading such as phonics and more specifically decoding skills. This underlying contributor to low high school reading scores is a problem that ultimately affects every content subject area. Many adolescents' underlying decoding problems impede their comprehension of text. Therefore, struggling readers often spend time trying to decode words that are unfamiliar, which distracts

them from thinking about information presented in text.

In order to best combat these factors that result in low reading scores in the high school setting, it is in the school's best interest to assist the adolescent struggling readers. There are several reading intervention programs on the market today that serve to assist struggling readers who lack proficiency in phonics instruction. In Anne Arundel County, the Office of Secondary Education has adopted the reading remediation programs *System 44* and *Read 180*.

This intervention is offered to 9th and 10th grade below-level struggling readers. The *Read180* and *System 44* programs provide comprehensive, developmental reading instruction designed to meet common core standards for struggling readers. Direct and explicit reading instruction is provided in decoding, fluency, vocabulary, comprehension, and writing. According to Vineland Public Schools Curriculum (2012), "this research-based balanced literacy program utilizes high-interest literature and data-driven technology to ensure that differentiated instruction and guided practice take place to support and motivate students as they progress toward becoming lifelong readers and learners" (p. 4).

Statement of Problem

The epidemic of below-level struggling adolescent readers is sweeping across our nation. All the while, the new standards and greater demand for higher levels of reading complex texts increases leaving our struggling readers ever farther behind. For years educators have tried developing an intervention and/or mode of remediation that will best serve adolescent struggling readers, but is going back to the basics the best method of intervention and remediation? The study serves to analyze the efficacy of teaching phonics and phonemic awareness training to adolescent struggling readers.

Hypothesis

The instruction of phonics and phonemic awareness training using the *System 44* software will have no significant effect on high school students who struggle with reading skills needed at the secondary level. Because *System 44* focuses on the basic elements of reading, the higher-level of thinking and analyzing text needed at the secondary level will not be achieved or assisted. Furthermore, it is predicted that since *System 44* is only offered for two years of secondary education, the gains that may be obtained will not benefit adolescent struggling readers in their overall path toward grade-level reading ability.

Operational Definitions

Reading Achievement is determined through the use of a measurement tool developed by Scholastic called the Scholastic Reading Inventory (SRI). According to Scholastic.com, "the SRI is a research-based, computer-adaptive reading assessment program for students in Grades K–12 that measures reading comprehension on the Lexile Framework® for Reading. The purpose of SRI is to describe what level of text complexity a student can read and comprehend with 75-percent accuracy, regardless of the student's initial ability level" (Fast and Reliable Low-Stakes Reading Test to Inform Instruction, n.d., About SRI section, para.1)

After taking the SRI, a student's Lexile level is assessed in order to determine placement within the *System 44* or *Read 180* program. "A Lexile reader measure can range from below 200L for beginning readers to above 1600L for advanced readers. Readers who score at or below 0L receive a BR for Beginning Reader" (Lexiles Measures and Grade Levels, n.d., What is a Lexile Measure? section, para.2). "The Lexile measure represents a student's level on a developmental scale of reading ability—the Lexile scale. In contrast, a grade equivalent represents a student's ability level in comparison to students who were in the specific test's

norming group" (The Lexile Framework for Reading, n.d., Lexile measure and grade levels section, para.1).

Students who place at or below 600L are administered the Scholastic Phonics Inventory (SPI) to determine placement in the *System 44* software program. The SPI "is a computer-based assessment that measures decoding and sight-word reading fluency" (Adaptive, Computer-Based Assessment,n.d.,SPI home, para.1). This assessment tool is used to identify students who lack foundational reading skills. The Scholastic Phonics Inventory (SPI) collects data on students' decoding accuracy as well as fluency. This helps to identify students whose lack of decoding proficiency impedes comprehension. The SPI uses real, as well as nonsense words, which assess students' ability to apply decoding skills to unfamiliar words (System 44 Program Overview, 2009,p.1).

Adolescent struggling readers that earn at or below 600L and are administered the SPI are automatically enrolled in the *System 44* software. *System 44* "is a foundational reading program designed for the most challenged struggling readers in Grades 3-12" (System 44 Program Overview,2009, p.1).
. Through the use of this program, students master the foundational reading skills required for success with the Common Core through explicit instruction in phonics, comprehension, and writing (System 44 Instructional Model, n.d.,para.1). While using the *System 44* software, struggling readers are given explicit instruction of the 44 sounds and 26 letters of the English language. Sound-spelling blending is used to develop decoding strategies and fluency (System 44 Instructional Model, n.d.,para.1).

Students enrolled in the *System 44* program are characterized as "struggling readers." Struggling readers can best be defined as "any student who is documented on norm-referenced

tests as reading one or more years below his/her current grade level and has shown to need

additional support in reading comprehension from his/her classroom teacher" (Hall, 2005, p. 1).

These students tend to be significantly below grade level and have difficulty decoding text, have

poor metacognitive skills, cannot comprehend what they read and struggle to apply

comprehension strategies appropriately.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review examines the benefits and drawbacks of teaching phonics and phonemic awareness training to older struggling readers, particularly high school students. Section one will define phonemic awareness training and phonics instruction. Since reading instruction is typically taught at the elementary level, section two will outline the reading expectations of a high school student and the role reading instruction plays in secondary education. Section three describes methods of reading remediation which are put into place to assist older struggling readers. Finally, section four describes interventions and methods that have and have not been proven effective in the secondary classroom.

According to Joseph and Schisler (2009), "More than 8 million middle and high school students are considered to be struggling readers, and among those, many are at a high risk of dropping out of school" (p. 132). Former reading teachers and literacy researchers Ivey and Baker (2004) state, "in all our work with struggling older readers, we have not come across a single student who would benefit from phonemic awareness training or phonics instruction" (p. 35). Denton and Al Otaiba (2011) add that "Students who do not learn to read adequately are more likely to have pervasive academic difficulties and are at high risk for school dropout. Poor reading has also been related to a higher incidence of delinquency and suicide" (p. 5)

Phonemic Awareness Training and Phonics

Typically phonemic awareness [PA] training and phonics instruction are done in the early grades. Phonemic awareness refers to the ability to focus on and manipulate phonemes in spoken words. PA can be taught using various tasks: phoneme isolation, phoneme identity, phoneme categorization, phoneme blending, phoneme segmentation, and phoneme deletion

(Farstrup, Samuels, & International, 2002). Teaching PA significantly improves beginners'

success in learning to read and is also a potent predictor of future reading skills (Farstrup et al.,

2002). According to Ivey and Baker (2004), "PA and phonics play a role in the earliest stages of

reading acquisition, when students begin to break the code and learn to match speech to print"

(p. 36).

After teaching PA training, educators transition to phonics instruction. "Phonics

instruction focuses on letter-sound correspondence and its role in spelling and reading" (Ivey &

Baker, 2004, p. 36). The goal of phonics instruction is to help children learn and use the

alphabetic principle, the understanding that there are systematic and predictable relationships

between written letters and spoken sounds. Knowing these relationships will help children

recognize familiar words accurately and automatically, and "decode" new words (Denton & Al

Otaiba, 2011). Educators teach phonics through various methods such as synthetic phonics,

analytic phonics, analogy-based phonics, phonics through spelling, embedded phonics, and

onset-rime phonics instruction (Denton & Al Otaiba, 2011). Phonics instruction helps children

learn to identify words, and it increases their ability to comprehend what they read. Reading

words accurately and automatically enables children to focus on the meaning of text—a skill

needed by older readers in understanding complex texts.

Reading Instruction in the High School Setting

By the time students reach their high school years, the idea is that all students can and

will read on or above grade level. Students need to be able to understand the meanings of words

and sentences, draw together the relationships between these meanings, both within and across

texts, and make inferences that go beyond printed words (Stothard, 2010).

<u>Common Core Curriculum Standards</u>

Statewide high school assessments determine whether this skill is being mastered in order to ensure college and career readiness. Basic literacy will no longer suffice for graduating seniors. With new technological demands in higher education and the workplace, students need to "evaluate, synthesize, and communicate effectively" (Guensburg, 2006, p. 1). Therefore, "the heart of adolescent literacy reform must be ensuring that students leave high school with the reading and writing skills they need to thrive in the 21st century career and college landscape" (Biancarosa, 2012, p. 23).

Previously, the National Reading Panel proposed teaching PA, phonics, fluency, vocabulary, and comprehension to ensure effective early reading instruction (Roberts, Torgesen, Boardman, & Scammacca, 2008). In order to best meet these new challenges, the National Reading Panel suggests modifying the five essential areas of effective early reading instruction to accommodate word study, fluency, vocabulary, comprehension, and motivation (Roberts et al., 2008).

As the impending common core curriculum standards are put into place across the state and the national PARCC assessment is quickly replacing individual state assessments of the past, it is the responsibility of the educators to alter reading instruction to meet the demands of the progressive future of education. "Research suggests that schools should attend to three major challenges students face in making the transition from basic literacy to higher-level literacy: mastering increasingly difficult texts, understanding the distinctions among reading in different content areas, and reading digital content" (Biancarosa, 2012, p. 25).

<u>Problems in Adolescent Literacy</u>

Despite the change in educational reform, there are still students who lack the necessary

reading skills to perform according to mandated expectations. According to Stothard (2010), "Sheffield University has recently reported that a startling 17% of teenagers are leaving school functionally illiterate and unable to cope with the challenges of everyday life. The study revealed that nearly one-fifth of 16 to 19-year-olds has a reading equivalency at or below that of an 11-year-old…" (p. 35). Furthermore, "a substantial proportion of these children have issues that appear to have remained undetected during the primary years" (p. 35).

These students [struggling readers] often require reading intervention in the secondary years. "Students with learning disabilities are primarily impaired in reading" (Denton & Al Otaiba, 2011, p. 14). This impairment in reading can lead to students falling further and further behind and ultimately potentially dropping out of school all together. Denton and Al Otaiba (2011) state that "Adding to the urgency of this situation is the fact that, with typical instruction, the vast majority of students who do not learn to read adequately in the early elementary grades remain impaired in reading as long as they are in school" (p. 14) and continue to higher education and/or the career field.

Struggling readers can be easily identified in the earliest years of reading instruction. Students with reading disabilities [RD] read slowly and with effort, tend to spend less time reading, have less developed sight word repertoires, read less fluently, and understand less of what they read (Roberts et al., 2008). In addition, poor readers will read haltingly when reading aloud, fail to identify certain words, omit selected words, repeat words, fail to use context clues, and/or fail to pay attention to punctuation marks (Ediger, 2005).

If struggling readers are not assisted with their reading disabilities, they will not be able to meet the demands in many work environments that require individuals to be able to use their reading and writing skills to interpret and solve problems. It is critical to provide struggling

readers with strategies that will enhance their ability to function in school and in the world (Wickstrom, 2004).

Reading Remediation

In order to best assist these struggling readers, proper remediation is needed at the secondary level. However, many high school teachers are not qualified and/or trained in reading remediation because many of the skills poor readers are lacking are taught at the elementary level. "To help current teachers improve instruction techniques, some schools are hiring literacy coaches" (Guensburg, 2006, p. 2).

In addition to inexperienced teachers who do not know how to properly remediate these older struggling readers, many students enter a reading remediation classroom unhappy, defensive, and resistant to assistance with their reading disability. "The majority of students feel that they do know how to read, and they do not understand why someone is telling them that they do not know how to read" (Wickstrom, 2004, p. 67). Furthermore, "Struggling readers are the students most likely to experience reading and writing instruction through a workbook, on a computer program, or from the least trained teachers in the school" (Ivey & Baker, 2004, p. 38). Despite these obstacles, "when reading ability is properly assessed in secondary schools, direct intervention can be provided to raise a child's achievement and enhance their future career prospects" (Stothard, 2010, p. 35).

Research-Based Interventions

In order to provide for the most effective mode of remediation for older struggling readers, the challenge lies in providing instruction that is powerful enough to narrow or close the gap with grade-level standards in reading (Roberts et al., 2008). In order to combat this epidemic of struggling readers, the No Child Left Behind launched Reading First and the Striving Readers

program. Both programs provide funding of $25 million to support reading achievement in poor secondary schools in 2005 (Guensburg, 2006). At the secondary level, those who make decisions about the instruction of struggling readers have to balance remediation with providing students with several opportunities to learn advanced literacy skills in all academic subjects. Deshler, an adviser for Reading Next, points out "every teacher in a middle or high school plays a role in addressing the literacy needs of kids" (Guensburg, 2006, p. 2). "Administrators must understand that a mandated program [reading intervention] will not eliminate poor test performance or any of the related problems. While test scores may improve, these programs will neither create readers nor prepare them for the reading and writing they will need as adults" (Wickstrom, 2004, p. 70).

Scripted phonics based programs are popular methods of providing reading remediation across the country. Popular programs used at the secondary level include *Scholastic System 44*, *Scholastic Read 180*, *Corrective Reading*, *REWARDS*, *Great Leaps*, and *Language!* However, according to Wickstrom (2004), "Scripted reading programs promise much but, when they meet individual students and teachers in real classrooms, the one-size-fits-all approach may succeed for no one. Still, teachers are required to use programs that districts buy" (p. 71). In Anne Arundel County, Maryland, *Corrective Reading* and *System 44* are two phonics-based programs used at the secondary level to assist in reading remediation. Both programs are used for low reading level secondary students.

Corrective Reading "involves teaching word attack skills in isolation and in context with an emphasis on basic sound-symbol associations of individual letters, digraphs, and blends as well as teaching correct identification of similarly spelled words" (Joseph & Schisler, 2009, p. 140). *Corrective Reading Part C* is for the student who has acquired very basic word attack

skills. It is aimed at teaching multisyllabic words, increasing fluency, and helping children read expository text or content-area textbooks (Joseph & Schisler, 2009).

According to scholastic.com, *Scholastic System 44* is a foundational reading program designed for struggling readers in Grades 3-12 and is focused around software that delivers direct, systematic, research-based instruction and practice. To deliver instruction, the model provides a combination of software and teacher-led instruction. Students work on *System 44* software for 15–20 minutes daily, complete independent reading (15–20 minutes) from a wide variety of nonfiction materials that are easy enough for beginning readers but interesting enough to engage even high school students (Ivey & Baker, 2004), and are exposed to teacher-led direct instruction (20 minutes) in phonics and phonemic awareness skills.

While *System 44* is a scripted phonics and PA program, it appeals to high school struggling readers to an extent. Since motivation is now one of the key elements of reading instruction, *System 44* provides reading materials that reflect interests of older struggling readers. Overall, research has shown that teaching word reading skills to adolescents produces positive reading achievement outcomes (Joseph & Schisler, 2009). Struggling readers need plenty of opportunities to read text that makes sense to them.

Research demonstrates that other interventions and methods of remediation have been proven effective with older struggling readers. For example, researchers concluded that explicit instruction on phonological awareness coupled with explicit instruction on word identification is needed for older struggling readers (Joseph & Schisler, 2009). Furthermore, students with serious reading difficulties should receive daily, intensive small-group reading intervention in addition to daily classroom reading instruction. Evidence has shown teachers who succeed with lower-achieving readers spend most of their time working with individuals or small groups rather

than in front of the class (Denton & Al Otaiba, 2011).

While research and evidence supports reading remediation to achieve higher-levels of overall literacy, it has been determined that "training in PA and phonics [to older students] may lead to higher scores on tests of PA and phonics knowledge, but such instruction will not improve struggling readers' ability to read. No evidence suggests that focusing on sound-level, letter-level, or word-level instruction will make older struggling readers read more. In fact, such an emphasis might make them read less" (Ivey & Baker, 2004, p. 36) "According to the 2000 National Reading Panel's report, PA training and phonics instruction produce the most benefits for young students, with diminished results for older students" (Ivey & Baker, 2004, p. 35).

Summary

The urgency to achieve grade level proficiency in reading is looming in the mind of every educator, from elementary to high school. The daunting task of getting struggling readers to meet the expectations needed to be successful in college and post-grad careers is hefty but not impossible with the appropriate interventions and methods of remediation. Sending older struggling readers back to basics may seem appropriate, but it is not realistic for the actual learner in the actual classroom. Older struggling readers cannot benefit from phonemic awareness training and phonics instruction; therefore, the focus should be on high-level literacy needed for the 21st century career and college landscape.

CHAPTER III

METHODS

The purpose of this study was to analyze the efficacy of teaching phonics and phonemic awareness training to adolescent struggling readers. The study used a quasi-experimental design comparing the progress of three ninth grade students enrolled in the *System 44* reading intervention program.

Participants

Students participating in this study are enrolled in the ninth grade section of *Read 180/System 44* at a midsize high school in Anne Arundel County. According to the 2012 Maryland Report Card (2012), the study school has 1,934 students enrolled. Of those 1,934 students, 1,033 are males and 901 are females (2012 Maryland Report Card, 2012). 1,154 of enrolled students are White, while 482 are Black/African American; the remaining 298 students are of various ethnicities such as Indian, Asian, Hispanic (2012 Maryland Report Card, 2012). 37.3% of students enrolled at the study school receive Free and Reduced Meal Services (FARMS), and 10.8% of the students receive special education services (2012 Maryland Report Card, 2012).

The students selected to participate in this study were chosen based on testing data collected during their eighth grade year in one of the two feeder middle schools. Students scoring below proficient reading level on their MSA, Individualized Education Plan (IEP) reading goals, teacher recommendation, and analysis via the Board of Education Reading Specialists matriculated in the *Read 180/System 44* program during their ninth grade year.

The three students received FARMS and special education services. Special education services are provided through individualized educational plans (IEP) with specified reading

goals. Of the three male students, two are Black/African American and one is White/Caucasian. All three students entered the *Read 180*/*System 44* program reading at a beginning decoder reading level. A beginning decoder has basic phonemic awareness (letter names and letter-sound correspondence) skills and foundational phonics skills. All three students' reading levels were equivalent to first grade or below.

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Instruments

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Students enrolled in the *Read 180*/*System 44* reading remediation/intervention program are assessed upon entering the course within the first week of enrollment within the course. Students are administered the Scholatic Reading Inventory (SRI) to determine placement within the *Read 180* program. Students scoring at or below the Lexile of 600 are administered the Scholastic Phonics Inventory (SPI) to determine placement within the *System 44* program.

The SRI "is a research-based, computer-adaptive reading assessment program for students in Grades K–12 that measures reading comprehension on the Lexile Framework® for Reading (Fast and Reliable Low-Stakes Reading Test to Inform Instruction, n.d., About SRI section, para. 1). "The purpose of SRI is to describe what level of text complexity a student can read and comprehend with 75-percent accuracy, regardless of the student's initial ability level" (Fast and Reliable Low-Stakes Reading Test to Inform Instruction, n.d., About SRI section, para. 1). The SRI is administered up to four times throughout the school year to determine growth throughout the program.

The SPI "is a computer-based assessment that measures decoding and sight-word reading fluency" (Adaptive, Computer-Based Assessment Tool, n.d., SPI home, para. 1). This assessment tool is used to identify students who lack foundational reading skills. The Scholastic Phonics Inventory (SPI) collects data on students' decoding accuracy as well as fluency. This

helps to identify students whose lack of decoding proficiency impedes comprehension. The SPI

uses real as well as nonsense words to assess students' ability to apply decoding skills to

unfamiliar words (System 44 Program Overview,2009, p.1). The SPI is administered twice

throughout the school year to determine growth and possible exit from *System 44* into *Read 180*

during the school year or transitioning into the student's 10th grade year.

Procedures

Students who are enrolled in the *System 44* reading intervention use the computer-based

software program in conjunction with the *Read 180* blended learning model. This learning model

begins with roughly 10-15 minutes of whole group instruction followed by 45–60 minutes of a

three-group rotation between independent reading, software and small-group instruction and

ending with ten minutes of whole-group wrap-up.

During whole-group, the "teacher begins the day by providing systematic instruction

using the student workbook (rBook) in reading skills and strategies, vocabulary, and grammar to

the whole class"(Scholastic.com, n.d., System 44 Whole Group Instruction section, para.1).

Whole-group typically lasts 10–15 minutes, *Read 180* and *System 44* students work out of the

same text and follow along with the systematic instruction of the teacher.

After whole-group, students break into three groups and begin rotating to three different

work stations: small-group, software, and independent reading. Each rotation lasts on average

15–20 minutes. For each of the rotations, the *System 44* students are grouped together.

During small-group, *System 44* students work out of the 44Book or the rBook. "Through

teacher-led differentiated instruction students develop skills in vocabulary, reading

comprehension, phonics, academic discussion, and writing" (Scholastic.com, n.d.,System 44

Small-Group Instruction section, para.1). Students work with the teacher to improve phonics

through word building and word articulation.

After small-group students rotate to the *System 44* software. Through the use of this program, students master the foundational reading skills required for success with the Common Core through explicit instruction in phonics, comprehension, and writing. (Scholatic,com, n.d., System 44 Common Core State Standards section, para.1). While using the *System 44* software, struggling readers are given explicit instruction of the 44 sounds and 26 letters of the English language. Sound-spelling blending is used to develop decoding strategies and fluency (System 44 Instructional Model, n.d.,para.1).

The final rotation after the *System 44* software is independent reading. During independent reading, *System 44* students select from the leveled *System 44* library. Books in the library are leveled according to Lexile ranging from 100L to 450L. "The *System 44* Library includes 56 high-interest, age-appropriate titles available in three formats: as Paperbacks and Audiobooks" (Scholatic.com, n.d., System 44 Student Library section, para.1). Each book "targets decoding skills and strategies to promote comprehension, while building vocabulary and content-area knowledge" (Scholatic.com, n.d., System 44 Student Library section, para.1).

After all *System 44* and *Read 180* students have transitioned through each of the three rotations, all students come together for whole-group wrap-up. During wrap-up students reflect on what they have learned throughout whole group and small group. This is also an opportunity to discuss what students have read during independent reading and while working on the *System 44* or *Read 180* software.

While *System 44* students tend to focus more on the skills needed to master phonics and phonemic awareness training, *Read 180* students work on the skills necessary for comprehension and fluency (sequencing, compare and contrast, summarizing, etc.). The *Read 180* and *System 44*

blended instructional model allows for differentiated instruction and an individualized approach

to reading intervention and remediation.

CHAPTER IV

RESULTS

The purpose of this study was to analyze the efficacy of teaching phonics and phonemic awareness training to adolescent struggling readers. Participants involved in the study were enrolled in the reading intervention software program, *System 44*. Students enrolled in this intervention are taught phonics and phonemic awareness training on a program developed for adolescent struggling readers.

The pre- and posttest SRI scores for four students enrolled in the *System 44* reading intervention software were analyzed using a t-test for paired subjects. The results are presented in Table 1 below.

Table 1

Pre- and Post-SRI Test Results

Test	Mean	N	Standard Deviation	t	Significance
Pretest	390.8	4	121.24	0.42	0.71
Posttest	409.0	4	144.09		

The null hypothesis that there would be no significant difference in the pre- and posttest scores of high school students enrolled in phonics and phonemic awareness software was supported.

CHAPTER V

DISCUSSION

When the participants were given the pre- and posttest assessment, the data reflected no significant difference in their ability to master and apply phonics and phonemic awareness skills. Participants 1, 2, and 3 entered the program as beginning decoders, and by the time they left the program they remained beginning decoders. Participant 4 entered the program as a beginning decoder and left the program as a developing decoder.

Participant 1 began the software with a Lexile of 340 and improved to a Lexile of 484 at the end of the program. Participant 2 began the *System 44* software reading at a Lexile of 244 and dropped to a Lexile of 193 by the end of the study. Participant 3 entered the study reading at a Lexile of 474 and improved to a Lexile of 485. Participant 4 began the study reading at a Lexile of 505 and decreased to 474 by the end of the study. All participants entered the software and study reading at or below kindergarten/first grade reading level. By the close of the study, all four participants remained at this level of reading ability despite the use of the phonics and phonemic awareness intervention software.

Implications

Over the last several years, numerous studies have been conducted to determine the efficacy of teaching phonics and phonemic awareness. In the vast majority of studies, the research has focused on these skills being taught at the primary level, but very few have shed light on teaching these same skills to secondary delayed readers. Based on the results from the study, it can be concluded that teaching these basic elements of reading to high school struggling readers does not demonstrate enough gains to warrant going back to the basics.

By the time these struggling readers have entered high school, they are resentful of and frustrated with the very task of reading. To force these students to go back to an elementary level of instruction comes off as insulting to their intelligence. These students do not engage with the reading intervention, and they do not gain enough of the basic skills to transfer the knowledge to their content area work. Furthermore, most of these students have Individual Education Plans (IEP) in place that mandate a human or electronic reader be made available for content area work and/or testing. Therefore, on any state assessments these struggling readers will have the materials read to them. While these students do still need instruction in reading, the time spent on remediation should be focused on higher level thinking and comprehension skills that are needed to pass state assessments and content area work. Simply put, with the demands and standards that must be met with the new Common Core, there is no time to go back to the basics.

Threats to Validity

During this study, certain factors affected the validity of the final results. The length of time a participant was enrolled in the software contributed to the validity of the study. The premise was that the longer a student is exposed to and works with phonics and phonemic awareness training, the more likely he or she is to become proficient in these basic elements of reading.

Participant 3 was removed from *System 44* via the parent's request after only working on the remediation software for one month. The parent removed the student from *System 44* because she did not feel her child needed this level of remediation despite the data that was provided that indicated the need for phonics and phonemic awareness training. The parent allowed the student to remain in the reading intervention course, but she would not allow the educator to have the student work on the *System 44* software. The student worked on the *Read 180* software;

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however, since he was not proficient in phonemic awareness and phonics, he struggled with the *Read 180* tasks because he could not read a lot of the content. Had this student participated in the *System 44* software, he might have improved his reading abilities by more than 11 points in a two-year period. Nonetheless, he most likely would not have been proficient in decoding skills.

Participant 1 was removed from *System 44* after he demonstrated little to no gains after a year of instruction in the software. The improvement in Lexile for Participant 1 only came after being removed from the *System 44* software and placed into the *Read 180* software which focuses on comprehension skills, phonics, fluency, writing, and vocabulary. The student continued to work on the *Read 180* software for a year and improved by 144 Lexile points, the rough equivalent of 1-2 grade levels gained.

However, Participant 2 was enrolled in the *System 44* software for one year and Participant 4 was enrolled for a year and half, and neither made gains in reading. Both participants were increasingly frustrated with the intervention software. Both participants were deeply impacted by the social implications of being enrolled in software that teaches the basic elements of reading (phonemes, phonics, blends, etc.). The software requires the students to record themselves sounding out letter sounds, blends, simple sentences, etc. The participants were embarrassed by the tasks they had to complete. This led to the participants acting out in order to avoid working on the software, sleeping to avoid the work, or simply not engaging with the software.

Comparisons to Previous Studies

The results of the study were directly supported by the literature. Several researchers came to the same conclusion: teaching phonics to high school/adolescent struggling readers will produce little to no gains in reading.

Throughout the duration of the current study, the researcher witnessed behaviors similar to those discussed in "High School Students Need More Than Mandated Phonics Instruction" (Wickstrom, 2004). Dorothy Hyatt taught reading improvement to ninth graders in an urban district. When teaching her students, Hyatt experienced a group of individuals who were not happy to be in yet another reading course and were thus openly defensive. Much of the same kind of negative attitude toward being in a reading program in high school was exhibited by the students in the current study. The students who were enrolled in the phonics and phonemic awareness program, *System 44*, were resistant and obstinate when told they were going back to the basics. Just like Hyatt's students, they felt "they *do* know how to read, and they do not understand why someone is telling them that they do *not* know how to read" (p. 66).

The students used for this study had been enrolled in some form of reading intervention since their elementary years. "At various points in their educational process, students may have developed some reading skills and strategies, but these are not enough to assist them with the type of work that is expected of them in high school" (Wickstrom, 2004, p. 66). In fact, "even these students with the most severe difficulties will likely have basic understandings about the role of sounds within words and about letter-sound relationships" (Ivey & Baker, 2004, p. 2). Despite the lack of basic reading skills these students possess, "advocates for adolescent literacy recognize that the issue is broader than simply providing remediation for students who cannot read at basic levels" (Biancarosa, 2012, p. 22).

The *System 44* students used in this study demonstrated what was hypothesized; phonemic awareness training or isolated phonics instruction does not help older struggling readers become more competent at reading (Ivey & Baker, 2004). In fact, Participants 2 and 4 reflected exactly what Ivey and Baker (2004) stated: phonemic awareness training and phonics

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instruction produce diminished results for older students. Neither participant showed gains in Lexile reading level. In fact, upon leaving the intervention, these students still could not demonstrate basic literacy skills in order to perform higher-level literacy skills needed to function in school and in the world.

Suggestions for Future Research

In an age where adolescent literacy reform is on the forefront of education, the need to effectively assist our older struggling readers is paramount. The question remains, how do we best facilitate our struggling readers when there are so many gaps in their basic literacy skills? The reading intervention programs purchased by public schools may improve test scores, but these programs will not create readers, nor will they prepare struggling readers for the reading and writing they will need as adults. Therefore, to best assist our struggling readers, administrators in charge of purchasing and facilitating reading intervention programs must be knowledgeable about what literacy is and what it takes to become literate. Furthermore, those instructing our struggling readers must be well trained and knowledgeable about how to best engage and educate adolescent delayed readers. Those educators must be willing to take risks when developing curriculum that will cater to the specific needs and interests of their students.

Students who are lacking basic reading skills will struggle during their high school years, but returning them to the basics that were designed to be mastered in the elementary years is not the answer. Further research needs to be conducted on what to do for these struggling readers in order to fill the gaps and encourage reading across content areas. The more motivated students are in learning to read, the more likely that they will be able to read to learn.

References

Adaptive, Computer-Based Assessment Tool | reading assessment | scholastic phonics inventory
. (n.d.). Retrieved 6/24/2013, 2013, from
http://teacher.scholastic.com/products/readingassessment_spi/howitworks.html

2012 Maryland report card: Anne Arundel County. (2012). Retrieved from
http://www.mdreportcard.org/Entity.aspx?k=021323

Biancarosa, G. (2012). Adolescent literacy: More than remediation. *Educational Leadership,*
69(6), 22-27.

Denton, C. A., & Al Otaiba, S. (2011). Teaching word identification to students with reading
difficulties and disabilities. *Focus on Exceptional Children, 43*(7), 1-16.

Ediger, M. (2005). Struggling readers in high school. *Reading Improvement, 42*(1), 34.

Farstrup, A. E., Samuels, S. J., & International, R. A. (2002). *What research has to say about*
reading instruction (3rd edition). Newark, DE: International Reading Association.

Fast and Reliable Low-Stakes Reading Test to Inform Instruction. (n.d.). Retrieved from
http://teacher.scholastic.com/products/sri_reading_assessment/programoverview.htm

Guensburg, C. (2006, 02). Why Johnny (still) can't read: Schools meet the challenge of
producing teen readers. *Edutopia, p.1-2*. Retrieved from www.edutopia.org/adolescent-
literacy-programs

Hall, L. A. (2005). Struggling Readers and Content Area Text: Interactions with and Perceptions

    of Comprehension, Self, and Success. RMLE Online: Research In Middle Level Education,

    29(4), 1-19.

Hernandez, D. J., & Casey, A. E. (2011). *Double jeopardy: How third-grade reading skills and*

    poverty influence high school graduation. Baltimore, MD: Annie E. Casey Foundation.

Ivey, G., & Baker, M. I. (2004). Phonics instruction for older students? Just say no. *Educational*

    Leadership, 61(6), 35-39.

Joseph, L. M., & Schisler, R. (2009). Should adolescents go "back" to the basics?: A review of

    teaching word reading skills to middle and high school students. *Remedial and Special*

    Education, 30(3), 131-147.

Lexile® Measures and Grade Levels. (n.d.). Retrieved from http://www.lexile.com/about-

    lexile/grade-equivalent/

 Vineland public schools 2012-2013 curriculum. (2012). *Read 180–Stage B*. Retrieved from

    http://www.vineland.org/curriculum/2012-updates/6-8/la/read180b.pdf.

Roberts, G., Torgesen, J. K., Boardman, A., & Scammacca, N. (2008). Evidence-based strategies

    for reading instruction of older students with learning disabilities. *Learning Disabilities*

    Research & Practice, 23(2), 63-69.

Stothard, S. E. (2010). Identifying reading difficulties in the secondary school years. *Literacy*

    Today, (64), 34-35.

System 44 Program Overview. (2009). 1-8. Retrieved from

    http://teacher.scholastic.com/products/fundingconnection/grant_resources/program_overvie

    ws/pdfs/2009_ProgramOV_S44.pdf

System 44 Instructional Model. (n.d.). Retrieved 6/24/2013, 2013, from

    http://system44.scholastic.com/about/instructional-model

Wickstrom, C. D. (2004). High school students need more than mandated phonics instruction.

    English Journal, 93(5), 66–72.