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MIDDLE SCHOOL SPECIAL EDUCATION READING TEACHERS' EXPERIENCES
UTILIZING STUDY ISLAND TECHNOLOGY TO ENHANCE MALE
STUDENTS' LITERACY: AN EXPLORATORY CASE STUDY

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ABSTRACT

This mixed methods study examined the experiences that four middle school special education teachers had implementing an online education program called Study Island in their reading classes. The teachers wanted to increase their students' reading decoding and comprehension skills and also wanted to prepare their students for their state's standardized test. Many male students today are underachieving academically and lack motivation to excel in their studies. Because boys comprise the majority gender in most resource classes (i.e., only special education students), this study focused on the male population in order to determine whether an online education program with a game component such as Study Island would induce them to focus on content-specific reading passages and utilize their analytical skills to answer the associated multiple choice questions correctly. This study used interviews, observations, and analysis of Study Island reporting data in order to understand the experiences of the teachers and determine if the middle school boys were progressing in their literacy ability. The results of this study revealed that Study Island was effective if students were well-behaved and focused on the material, thereby enhancing the teachers' perceptions of personal satisfaction. However, if students were distracted, unfocused, and unmotivated, less improvement was achieved and teachers felt sadness due to the lack of progress. This study also found that if teachers felt comfortable using technology, and received training and mentoring, they were more apt to use an online education program.

PREFACE

The research study was inspired by my viewpoint that teaching is the same as it has always been—an imparting of knowledge. Teaching methods have evolved over time and I am open to utilizing any method that helps my students learn. As a special education teacher I have watched my students struggle to cognitively process reading material and I always strive to present information in interesting and fun ways. Online education provides a new opportunity that teachers can use to help students acquire information in a way that is familiar to them because many of them play video games in their personal lives. Therefore, I conducted this study in order to determine if using an online education program with a game component would create buy-in for curriculum content with the male population of resource reading classes. This research study revealed that teacher technology comfort level and student behavior are important elements in the successful implementation of an online education program.

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Althea Gibson once said, “No matter what accomplishments you make, somebody helped you.” That is especially true in my case. I could not have gone through the doctoral process without a wonderful cadre of people who helped me at every stage of this journey. I am so thankful to have them in my life and I share my Ph.D. accomplishment with them.

My father and mother, Victor and Juanita Grimes, have always encouraged me to reach for the stars and made sure that I had the best education possible. I truly appreciate the love, guidance, and support that they have given me my entire life. In addition, my sister, Robbin Grimes Sally, has been my champion and has given me keen insight into the world of higher education. She knew we were a family of educators before I did and she used her knowledge to help me transition from the healthcare information technology field to the K-12 classroom.

I have received immeasurable help and encouragement from friends and family during my doctoral coursework and in bringing this dissertation to fruition. I was blessed to meet and form a lifelong friendship with my fellow “doctoral diva,” Melanie Beaver. She and I immediately bonded when we met and during our journey she “brought” me to several classes on her laptop via Skype, kept me informed regarding Indiana State University campus happenings, allowed me to stay with her and her family during my on-campus visits, and was a Godsend to me in a myriad of ways.

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Dr. Sue Kiger, my committee chair, spent hours emailing me regarding what needed to be done, chatting with me to provide encouragement and information, and reviewing the various incarnations of this dissertation in order to provide feedback on ways to make it better. Her contribution was invaluable. Dr. Larry Tinnerman and Dr. Robin Burden provided guidance on ways my research could add to the academic body of knowledge in the areas of curriculum and special education. They spent time discussing theory and application with me and provided ways in which I could use this research to help make learning more meaningful for both general and special education students. Their involvement was instrumental in bringing my research to completion.

I have been a part of the Indiana State University (ISU) family since I attended a two-week honors seminar the summer between my junior and senior years of high school. I have made many friendships along the way both as a student and as an alumna. I appreciate the mentoring that Dr. Brad Balch, Dean of the Bayh College of Education, has given me. I value our discussions about higher education and the K-12 classroom. Also, John Newton, Emeritus Vice President for Alumni Affairs and Constituent Relations, helped to make ISU a part of my life both in Atlanta, Georgia, and Terre Haute via alumni activities.

I could not have conducted this research study without the support of my middle school's principal and special education instructional support teacher (IST). They provided assistance to me every step of the way. I also want to thank my teacher participants. They made time for interviews before and after school and helped me to understand what they were experiencing so that I could write their words down accurately and succinctly.

Lastly, I also want to thank Study Island for allowing me to use their online education program as part of my research. Due to their generosity, I was able to study the implementation

of an actual program that my teachers and students used on a regular basis. This made my research study especially relevant to me as a classroom teacher.

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CHAPTER 1

INTRODUCTION

Many male students in Western countries are underachieving academically (Hodgetts, 2010; Lindsay & Muijs, 2006). Furthermore, many of them do not like to read informational text or fiction. This phenomenon has a potentially negative impact on society at large because these boys may not reach their full potential. A study by the National Assessment of Education Progress showed female students on average achieved consistently higher scores in reading and writing (Watson, Kehler, & Martino, 2010). In addition, Watson et al. (2010) noted 2006 test results from the Programme for International Student Assessment that found that reading scores accounted for the largest gender gap.

The U.S. Department of Education (2004) stated in a press release that “at the secondary school level, the gap in the National Assessment of Educational Progress (NAEP) reading achievement grew from 10 points in 1992 to 16 points in 2002, with males performing lower than females” (para. 2). According to statistics cited by Kafer (2004), on the 2003 NAEP reading test in fourth and eighth grades, girls performed better on average scores than boys by seven and 11 points respectively. Moreover, young women are more apt to continue their formal education at higher education institutions after they graduate from high school and to obtain a bachelor’s degree within a five year period. A 1997 Metropolitan Life survey of gender and education found that, “contrary to the commonly held view that boys are at an advantage over

girls in school, girls appear to have an advantage over boys in terms of their future plans, teachers' expectations, everyday experiences at school and interactions in the classroom” (Louis Harris and Associates, 1997, p. 3).

Western nations have made efforts to identify underachieving boys in their school systems. In earlier times the educational system in the United Kingdom (UK) was focused on helping girls attain academic success. However, beginning in the early 1990s education and government authorities noted a troubling trend in regards to boys. According to the UK’s Department for Education and Skills, “statistics for 1992/93 through to 2002/03 indicate consistent superiority of girls over boys” (Lindsay & Muijs, 2006, p. 314). This issue has caused concern regarding the possible reasons that many boys are not succeeding academically, and a call was made for educators to focus on this issue.

In March 2000, the Australia House of Representatives initiated an inquiry into the education of boys in order to determine the nature of male students’ poor performance and identify solutions for the underachievement issue. One dominant theme that emerged was the view that teachers were responsible for male students’ underachievement when they fail to determine methods that help them best learn academic content (Hodgetts, 2010). However, Hodgetts (2010) stated that alternate viewpoints have been expressed to counter this argument. First, placing the responsibility of male students’ underachievement on teachers limits the totality of what it means to be a boy in a school setting. Second, this argument diverts consideration from school-age boys’ traits to examination of teachers.

Gender differences in academic accomplishments have been associated with a variety of environmental and biological influences. Andreano and Cahill (2009) conducted studies of spatial, verbal, autobiographical, and emotional memory tasks for which sex differences have

been frequently noted. They “found that the female verbal advantage extends into numerous tasks, including tests of spatial and autobiographical abilities, but that a small but significant advantage may exist for general episodic memory” (Andreano & Cahill, 2009, p. 248). A study by Burman, Bitan, and Booth (2008) determined that girls utilize an advanced language network, and boys process auditory and visual words differently than girls. It is important to note that not every female student did better than male students on language tests and that researchers have found that only the average is slightly elevated (Chudowsky & Chudowsky, 2010).

Statement of the Problem

Many boys today display the attitude that reading is boring (Sax, 2007). Websites such as GuysRead.com provide recommendations for literature that might be of particular interest to boys in order to try to combat this impression (Cox, 2010). Questions have arisen as to why boys do not like to read. Sax (2007) cited research that listed five factors that may cause boys to drift away from the practice of reading. These influences include (a) the increased popularity of video games, which, over time, may cause their users to be more easily distracted, (b) medications for Attention Deficit Hyperactivity Disorder (ADHD), which may cause changes to the motivational areas of the brain, (c) endocrine disruptors from chemicals in the environment, (d) a devaluation of masculinity over time (e.g., the father’s image in *Father Knows Best* versus Homer Simpson), and (e) changes in how education is delivered (e.g., kindergarten was used to promote socialization skills and now the lessons are academically oriented).

Marino (2009) indicated that as students with learning disabilities advance past the fourth grade they are increasingly expected to read nonfiction informational text to acquire knowledge. Many students with learning disabilities find it difficult to decode the symbols on the page and comprehend the material. Technology tools can help teachers provide differentiated instruction

so that individual learning needs are met. Teachers can design lessons that are tailored to enhance comprehension, decoding, and vocabulary skills. Researchers have found that, when used effectively, these lessons help simplify the knowledge acquisition process and provide a means to scaffold students' understanding of the material.

Carrington, Tymms, and Merrell (2008) noted that many people assume that male teachers are more likely to understand and tap into the learning style of younger males. It has been further debated that male students might learn better from adult men who facilitate active educational pursuits involving male-oriented activities. However, studies have shown that same-gender matching does not have an impact on student academic achievement. Lahelma (2000) suggested that students do not place much importance on the gender of their teacher. Lahelma further found that students valued traits that were not gender specific like fairness, having a good sense of humor, and kindness. Students admired teachers who had good classroom management skills. The Carrington et al. (2008) study further supports this viewpoint when they posited, We found no empirical evidence to support the claim that there is a tendency for male teachers to enhance the educational performance of boys and, conversely, for female teachers to enhance the educational performance of girls. Of particular note is the finding that children taught by women—both boys and girls alike—were more inclined to show positive attitudes towards school than their peers taught by men. As far as attitudes to school are concerned, our study indicates that women teachers seem to bring out the best in both sexes. (p. 8)

Purpose of the Study

The purpose of this mixed methods study was to understand the effects of the use of a web-based learning program, Study Island (2012), to determine if it helped increase the decoding and comprehension of a selected group of male students with disabilities. Descriptive statistics were used to determine the change in the boys' reading interest and ability. This was facilitated by measuring their comprehension, vocabulary, and reading skills across the curriculum via Study Island generated reports. This study also examined several middle school special education reading teachers' experiences as they incorporated the program in their instructional practices. The differences in the teachers' experiences and satisfaction levels were examined. Use of descriptive statistics and ethnographical findings allowed insights into how the use of Study Island compared with traditional teaching methods.

Study Island is part of the Archipelago Learning, LLC, suite of online educational products. Study Island provides online, state-specific, standards-based assessment, review, and test preparation content for Grades K-12 in the areas of math, reading, language arts, science, and social studies. The reading section for Georgia schools is based on the Georgia Performance Standards (GPS) in the areas of (a) comprehension (e.g., characters, setting and historical moments, plot, sound and graphics, mood and tone, cultural literature), (b) vocabulary (e.g., context clues, root words and affixes, idioms and analogies, synonyms and antonyms), and (c) reading across the curriculum (e. g., message and theme, author's purpose, features of disciplinary text). Students' time spent on questions was tracked and the total number of correct answers and the percentage of correct answers were identified on reports. Study Island is very user friendly and many of today's technically savvy students find it easy to navigate around the

site's web pages. Students play interactive educational games to enhance the knowledge acquisition process.

Study Island has received positive reviews from administrators, technology specialists, and teachers. Study Island's (n.d.) *Georgia nline Criterion Referenced Competency Test* (CRCT) brochure noted the following statement made by a school principal: "Study Island is a wonderful program that meets the individual needs of all students in various subjects. Teachers can develop group lessons or implement a plan for the specific strengths and needs of individual students" (Study Island, 2012, p. 4). Study Island has been the subject of various case studies, video testimonials, and research studies. Study Island administrators gave permission to use their product and images for the study (Appendices A and B) and to show a copy of their home page (Appendix C), examples of reports (Appendices D and E), a screenshot of an interactive game (Appendix F), the CRCT brochure (Appendix G), and other corporate information (Appendix H) to help elucidate these for this study.

This mixed methods study was conducted over a two month period and chronicled the experiences of several special education reading teachers as they utilized Study Island in their sixth, seventh, and eighth grade resource (i.e., small group) classes. Many of the boys in the resource reading classes had low Lexile scores and had been diagnosed with learning disabilities, emotional and behavioral disorders (EBD), other health impairment (OHI), and autism. A Lexile score is a measure that is useful for matching readers with literature such as books, magazines, and articles.

Reading is a complex process to teach. Instructors use a variety of techniques to convey the reading education process to students. The lecture method is especially popular as it is an efficient means to deliver content en mass. According to Freire (1970), the education process is

a banking model, and lecturing “becomes an act of depositing, in which the students are the depositories and the teacher is the depositor” (p. 72). Teachers use various means to deliver lessons to students in order to help them understand and retain the content. Throughout the school year students are provided access to visual, kinesthetic, and audio material containing information pertaining to the many components of the reading process. These lessons help pupils integrate thinking, understanding, listening, speaking, and writing. Generally, reading skills are taught in the order of the cognitive complexity needed to understand and complete the required tasks: (a) main idea, (b) sequencing, (c) context clues, (d) predicting, (e) cause and effect, (f) summarizing, (g) inferences, (h) figurative language, and (i) imagery (LinguiSystems, 2002).

Reading is also a complex process to learn. A person must view symbols, cognitively process the symbols into words and the words into sentences, and give the sentences meaning all at the speed of thought. In the United States, students are generally taught to read using the phonics method, the whole language method, or a combination of the two. Phonics instruction “teaches the relationships between the letters of written language (graphemes) and the specific sounds of oral language (phonemes)” (Carnine, Silbert, Kame’enui, & Tarver, 2004, p. 38). Furthermore, Carnine et al. (2004) stated that whole language uses credible literature, and students read the words that are seen on the page. In whole language instruction, comprehension is not only the mandate of reading education but also is the method through which students acquire the ability to read.

During the middle school years, students attending classes in the study district’s system must take either a foreign language or reading class as an academic course. Students who meet expectation on the state of Georgia’s CRCT are automatically allowed to take a foreign language

class. Students who do not attain a minimum passing score or who want to opt out of foreign language are placed in a reading class. Special education students who take reading are placed in either a team-taught (also known as inclusion) class that is instructed by both a general education teacher and special education teacher or in a resource class that is generally limited to a population of 12. The reading course provides an opportunity for students to expand their skills in comprehension and decoding. The curriculum emphasizes the use of varied content (fiction and nonfiction selections) and the application of reading strategies before, during, and after a passage is read. The reading course is also designed to help students to develop vocabulary and enhance their spelling skills. Students are placed in the resource setting in order provide them intensive support. Reading teachers also try to increase their students' motivation to access literature by asking them to complete a log detailing what they read during the prior week. Research has shown that teachers should help students track self-set goals that are rigorous but attainable (Morgan & Fuchs, 2007).

In addition to Study Island, the school district's special education teachers incorporate technology such as interactive smart boards, web quests, the Classroom Performance System (CPS) clicker game by eInstruction (n.d.), Scholastic's Read 180 program by Scholastic, Inc. (n.d.), the SOLO literacy program by Don Johnston, Inc. (n.d.), and the Edmark reading program by PRO-ED, Inc. (n.d.) to help students increase their literacy capability. For example, Scholastic's Read 180 program is used in the school district's Title I schools as an intervention tool to help both general and special education students achieve grade level competency through the use of differentiated instruction, interesting literature, and adaptive software. SOLO is designed to help low-achieving students and contains text-to-speech functionality that allows curriculum material to be adapted for use in the program. Words on websites and documents are

imported into SOLO and the software will subsequently highlight each word in color while a computer generated voice speaks it. Students are visually able to see the word, identify how it is spelled, and hear the word so they can cognitively process these components together. Special education students at this study's middle school take SOLO connections (also known as electives) classes in order to learn how to use it effectively so that they can maximize its capabilities.

Special education students in resource classes in this study's school are taught decoding strategies using the direct instruction reading method. Direct instruction "emphasizes the use of small-group, face-to-face instruction by teachers and aides using carefully articulated lessons in which cognitive skills are broken down into smaller units, sequenced deliberately, and taught explicitly" (Carnine et al., 2004, p. 11). Special education teachers at my middle school use the direct instruction SRA Corrective Reading Program by McGraw-Hill (n.d.) to help low functioning readers achieve grade level functionality. The SRA Corrective Reading Program materials include placement tests, progress tests, student books, teacher guides, and a reward system to help instructors easily facilitate scripted presentation oriented lessons.

This school district's special education reading teachers also use Scholastic's Inc.'s (n.d.) Read XL series to deliver lessons to students. There are three levels of books in the series for the sixth, seventh, and eighth grades. The Read XL series addresses reluctant reader issues. Each textbook in the series has engaging and relevant content, increasingly challenging stories, and instruction that targets struggling and non-English speaking readers; an emphasis is placed on expository (non-fiction) reading. The teacher's guide provides comprehensive lesson plans, student worksheets, and assessments. Reading teachers do their best to pass on a love of reading to their students. Pupils are given DEAR (drop everything and read) time at the beginning of

class to allow them to relax and enjoy a book or magazine of their choice. Their reading teachers also schedule time in my school's media center every two weeks for book checkout. Teachers stress the importance of reading for purpose and for pleasure.

Research indicates that teachers should provide *male friendly* curriculum content in order to increase the interest level of their students. Martino, Lingard, and Mills (2004) have noted that a "boy friendly philosophy" (p. 441) provides positive academic results. It has been suggested that boys need to be given more precise instruction and prefer activities that are energetic and get them away from their desks. They also perform better when given activities that are clearly defined and structured. Zaman (2008) theorized that most teacher education programs do not provide sufficient gender-sensitivity preparation, which might make educators more aware of the specific needs of their pupils when they begin to teach in the classroom. Teachers' beliefs have a powerful effect on their students, and a positive and supportive learning environment could help increase male students' reading interest and motivation (Sweet, Ng, & Guthrie, 1998). It has also been suggested that schools expand their definition of literacy to include non-traditional content such as magazines, website message boards, and chat rooms (Taylor, 2004).

Significance of the Study

Raising the literacy level of underachieving boys will help them be more successful in their academic classes and assist them in navigating in the 21st century. This study provides insight and assistance to other educators as they look for ways to help their male students increase understanding of the written word. It also provides teachers insight regarding the types of technology tools that might be effectively used with boys. This study provides teachers with

strategies to improve the academic success of their male students which, in turn, provides the larger society more productive workers and citizens.

Findings from this study may also help male students develop a scholar identity. Whiting (2006) conducted research with male African American students and his work provides insight into scholarly identity. Male students who find their identity in an academic setting do not believe that being smart and studious causes them to be effeminate or unmanly. They believe that being intelligent does not diminish their masculine energy. These men know that their academic achievements enhance their manhood, and their intellect is a gift to their families and communities.

Findings from this study may also help teachers identify ways to engage male students' interest in reading in order to instill in them self-awareness about the unlimited possibilities of their own achievements from an early age. Men who have high self-awareness understand their strengths and weaknesses and do not let limitations prevent them from achieving their goals. They find ways to overcome challenges (e.g., tutors for difficult subjects) and spend additional time studying in order to gain further clarity. They know the steps to take in order to achieve what they want and do what is necessary to finish what they start.

The need for achievement allows students to work harder and think creatively to reach their goals. Men who have a scholarly identity will value the quality of friends over the quantity of friends. They will also realize high academic accomplishments will be relevant throughout their lives and contribute to their overall success. They make decisions that will benefit them over the long term, realize that academic pursuits come first, and try to determine ways to work smarter. Boys who feel academic self-confidence know that they are strong students. They feel comfortable in situations outside their normal day-to-day existence and enjoy the challenge that

new learning brings. They do not feel inferior when placed in situations outside their comfort zone. They also do not feel the need to downplay their accomplishments.

Research Questions

Three research questions were formulated to guide this study. The main research question is presented in Number 1. The two supporting research questions are noted in Numbers 2 and 3. These questions are as follows:

1. What types of experiences do middle school special education reading teachers have when they teach lessons using Study Island?
2. Does using the interactive features of websites such as Study Island increase middle school males reading fluency and comprehension?
3. To what extent does playing video games on educational websites such as Study Island engage or fail to engage middle school males' interest in reading fiction and non-fiction content?

Definition of Terms

For the purposes of this study the following terms were defined as they apply to the context of special education and public school education:

Academic means “of colleges, universities, etc.; scholastic” (Agnes, 2002, p. 4).

Behavior disorder refers to “a disability characterized by behavior that differs markedly and chronically from current social or cultural norms and adversely affects educational performance” (Heward, 2003, p. 611).

Differentiated instruction refers to “a process to approach teaching and learning for students of differing abilities in the same class” (Polloway, Patton, & Serna, 2005, p. 163).

Learning disability refers to “a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities” (Heward, 2003, p. 243).

Study Island (2012) is a commercially produced web-based educational program designed to help students master academic content.

Underachieve means “to fail to do as well in school as might be expected from intelligence tests” (Agnes, 2002, p. 686).

Assumptions

This study was conducted at a middle school in a metropolitan area of a southeastern state, and the teacher participants worked together for five years. Based on the relationships forged over that length time and their experience with educational technology,

1. It was assumed that the middle school teachers gave accurate information regarding their experiences throughout the research period.
2. It was assumed that Study Island is a reputable, well-designed instructional tool.
3. It was assumed that the statistics listed in the reports generated by Study Island were accurate.

Limitations

This study had three limitations which are noted as follows:

1. This research study was limited to examining special education reading teachers’ experiences providing instruction to middle school boys diagnosed with learning disabilities, behavior disorders, and autism who received their academic content in resource classrooms and compared the experiences of a team-taught reading teacher.

2. This research study's technology tool was limited to the commercial product known as Study Island.
3. This research study was limited to one school location.

CHAPTER 2

LITERATURE REVIEW

Society has become more fast-paced and focused on immediate results. However, learning cannot be rushed. Each person assimilates knowledge at a different pace and has his or her own learning style (e.g., kinesthetic, visual, and auditory). Teachers must follow the curriculum outlined by their school district county and strive to deliver lessons in an interesting manner. Lessons are introduced as practical knowledge. Even if there is not an immediate need for the information, it is taught for a reason and this reason is explained to the students. School subjects are divided into different categories, but the umbrella category is life.

At its core, teaching is the same as it has always been—an imparting of knowledge. Teaching methods, however, have evolved over time and many curriculum theories have been developed. Teachers should be open to utilizing any method that will help students learn. The teacher/student rapport is built on an understanding of each other's culture, including the use of music and the use of technology. Just as teachers pass on their wisdom and experience of their generation, they should try to keep abreast of the developments that impact their students' lives. This helps foster a respect between the teachers and students and also enriches the learning experience.

I have striven to help my students learn to embrace reading and all the benefits that it can bring to their lives. However, I often heard my students tell me that they do not like to read. I

particularly heard my male students say, “This is boring. This is not cool.” I worked hard to find expository and fictional material that might interest them. I also probed their extracurricular activities and introduced reading content that was geared towards their actions.

General View of the U.S. Education System

The accountability movement that fueled the No Child Left Behind Act of 2002 dramatically changed how K-12 education is delivered in the United States. When the law was originally enacted, it mandated yearly school testing in math and English for Grades 3-8 and once in high school (Foote, 2007). Currently, the state of Georgia tests students in the content areas of language arts, social studies, science, math, and reading every April. According to Foote (2007), high achieving schools receive public adulation and financial incentives for increasing their test scores. However, critics have noted high drop-out rates for struggling students, and many students are still unprepared for the rigor of higher education courses even though they passed high school competency tests. These critics have questioned whether state tests measure meaningful learning and cognitive capability.

The *Big 3* (reading, writing, and arithmetic) is the most fundamental knowledge that an individual should know in order to help him or her navigate through life. These are skills that help a person make decisions, express themselves, process information, and learn about their environment. Dewey (1938) noted the importance of the Big 3 in his book, *Experience and Education*. He spoke of normal social control in this book and that a critical thinker could also utilize his or her intellect to recognize unfair treatment in society. For example, a person can read about an injustice that occurred in another community and use that community’s solutions to help his or her constituency. Martin Luther King is a person who was able to use the teachings of Ghandi in order to provide a nonviolent framework for the Civil Rights Movement.

In today's society, state governments decide what is worth knowing. Parents have very little control over the content that is taught to their children. Content specialists decide the curriculum for each grade level (e.g., Georgia seventh graders are taught about Africa, Asia, and the Middle East in their social studies classes). Each state's department of education determines the standards that are covered and what content is omitted. If teachers decide to fill in gaps in the content, they do so at their own risk because they lose time in conveying all the information that is required before the state test is given. For example, the social studies standard does not cover the teaching of ancient Sumaria, but several teachers at my middle school felt it was important to teach students about the cradle of civilization, the city-states, and the importance of the Tigris and Euphrates rivers so that cognitive connections were made regarding the history of the Middle East.

John Dewey (1938) knew the benefit of leveraging the experiences that students have with the education they receive so that greater understanding is developed. He stated that the main purpose of education "is to prepare the young for future responsibilities and for success in life, by means of acquisition of the organized bodies of information and prepared forms of skill which comprehend the material of instruction" (Dewey, 1938, p. 18). He also knew that in addition to subject matter, education also provides guidance to individuals on standards of behavior and moral conduct. He believed that people learn from their exposure to events and activities. He concluded that experience allows individuals to grow, develop impulse control, and to fuel desire in order to fulfill a purpose. His wisdom shows through his writings, and our various curricula are a reflection of his views.

It is hoped that students will be inspired to take it upon themselves and seek out information if they want to learn more about a particular topic. Schools cannot teach everything

nor cover all aspects about a subject. It is ultimately up to the individual to be a lifelong learner. Individuals and society as a whole benefit from the knowledge and participation of people who want to acquire information. Most people question why things are the way they are and it is hoped that they will be positive change agents. Our country and world benefit from their intellectual pursuits.

The Underachievement Problem

Many boys today are underachieving in the academic setting. There are several theories as to why this is occurring in Western countries. Zaman (2008) noted that this trend started to be noticed in the 1990s for boys in all racial and socio-economic status (SES) groups. In the past the focus was on girls, and efforts were made to help them achieve parity with boys in the educational system. Interestingly, however, over the past 30 years girls have been consistently outperforming boys. For example, a study by the U.S. Department of Education (2004) found that

in elementary school, female fourth-graders outperformed their male peers in reading and writing assessments. Gender differences in mathematics achievement have been small and fluctuated slightly between 1990 and 2003. At the secondary school level, the gap in the National Assessment of Educational Progress (NAEP) reading achievement grew from 10 points in 1992 to 16 points in 2002, with males performing lower than females. (para. 2)

In addition, a study conducted for the Center on Education Policy (CEP) found that during the middle school years a higher percentage of girls scored “at or above the proficient level in all three grade levels” in reading (Chudowsky & Chudowsky, 2010, p. 7). In fact, the variance between reading proficiency levels was great in certain states. There have been many

theories expressed regarding why some boys are less inclined to pursue academic interests. Various studies cited by Van Houtte (2004) have indicated that boys and girls have different study cultures and that girls have a more optimistic view regarding education. Girls are more apt to study and complete their homework after school. Boys, conversely, seem to place importance on how they are perceived by their peers and want to look *cool* as opposed to having a reputation for being smart.

Because of the focus on state testing, the social efficiency (also known as trade school) curriculum has lost its influence with public school systems. There has been much discussion whether that type of curriculum would provide a means to motivate boys to achieve academically. Lindsay and Muijs (2006) cited several studies that raise both the benefits and disadvantages of providing vocational education to students. Although there are many positive outcomes to providing students with tangible, marketable skills, there is concern that a trade school track can limit opportunities to white collar advancement and cause a person to be locked into a caste-like system.

Educational Technology

It has been generally acknowledged that there are two types of teacher knowledge: content and pedagogy. Shulman (1986) stated that it is assumed that most teachers possess knowledge about the content area that they are assigned to instruct. His statement is supported by current state and federal laws for the certification of teachers. For example, in the state of Georgia, teachers must pass a Georgia Assessments for the Certification of Educators (GACE) exam in the content area in which they want to teach (e.g., science, math, music). Furthermore, due to the No Child Left Behind Act of 2001, special education teachers must pass an exam that covers content knowledge (e.g., language arts, social studies) AND core knowledge (e.g., types

of disabilities, federal laws) in order to be classified as *highly qualified* by the federal government.

Good teachers are able to convey subject matter in a way that meets their students' needs. This is where knowledge of pedagogy is critical. Teachers need to know *how* to pass on the content that they are tasked to deliver. Shulman (1986) stated that teachers must know “the most powerful analogies, illustrations, examples, explanations, and demonstrations—in a word, the ways of representing and formulating the subject that make it comprehensible to others” (p. 7). I believe that pedagogy supports everything that a teacher does. Most teachers learn the principles and theories that support pedagogy through their university training programs, and school systems provide additional support through professional learning initiatives. However, there are some aspects of pedagogy that cannot be learned from a book. For example, although there has been extensive research conducted regarding classroom behavior management, individual teachers must find their own methods to control the behaviors of their students. They must learn the right level of firmness to use, the proper tone of voice that conveys displeasure or support, consequences that work or don't work, etc.

Teachers must know how learners acquire knowledge (cognition) and must be able to reflect on the “cognitive knowledge that he or she has, both general and content-specific” (Peterson, 1988, p. 7). Teachers are continually assessing their students' performance in order to maximize achievement. Special education teachers must write goals and objectives in some districts for Individualized Education Programs (IEPs) and must determine a student's present levels of performance. This allows special education teachers to incorporate differentiated learning strategies in the classroom (e.g., lessons for auditory learners, kinesthetic learners, and visual learners).

Mishra and Koehler (2006) expanded on Shulman's work by adding technology as the third teacher knowledge. We live in an information age and our students are digital learners. Teaching practices have to incorporate technology in order to engage students and teachers must deliver content in a way that is comfortable for them to receive. I am fortunate to have access to technology such as interactive whiteboards, LCD projectors, wireless laptop carts, overhead projectors, and TV/VCR/DVD players. In addition, technology such as the Classroom Performance System (CPS, n.d.) assessment tool is available to use in a game format in order to foster competition and provide a fun experience for the students.

These three types of teacher knowledge provide the framework for effective practices today. In addition to staying current with information in their subject areas and knowing how to deliver content, teachers must be open to try the plethora of technology that exists to see what works and what does not. They must be willing to stretch themselves and accept their own learning curves in order to become comfortable using new tools and techniques. Flexibility is the key to blending these three types of knowledge and utilizing them will benefit both our students and our education system as a whole.

There is currently a movement in the United States promoting science, technology, engineering, and mathematics (STEM). This movement grew out of a need to improve student math and science knowledge. Technology advocates believe that it is a discipline to help students advance their understanding of a particular topic and also access information in a 21st century manner (Kelley, 2010). Young people, just like their adult counterparts, currently use digital tools such as cell phones, iPads, and ebook readers in non-school settings to help make their lives easier. In the future, students will be able utilize their digital devices in the school

setting in a myriad of ways so that they can “maintain their portfolio, assess news and information when they need it, get their grades, and manage their learning life” (Scherer, 2011, p. 18). Schools will have to learn to augment this usage as opposed to limiting technology use.

Assistive Technology

Special education teachers use other types of technology to help students access school curriculum and educational technology in ways that meet their needs. Children with disabilities face many challenges navigating their environment in today’s fast-paced world. However, thanks to the advent of assistive technology (AT), many children are able to more easily integrate into their home, school, and social settings. AT has allowed children with exceptionalities such as learning disabilities, emotional and behavioral disorders, orthopedic impairments, vision impairments, mental retardation, and autism access devices that help “learning and living” (Lee & Templeton, 2008).

AT is generally defined as any “technology that allows an increase, maintenance, or improvement of the functional capabilities of an individual with a disability” (Morrison, 2007, p. 84). AT allows people with disabilities or learning difficulties to enhance their ability to function more effectively. In addition, the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 defined AT devices as “any item, piece of equipment or product system, whether acquired commercially or off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities” (as cited in Parette & Stoner, 2008, p. 313).

Parents and teachers now recognize the benefit of exposing children with disabilities to AT at an early age. When AT services are needed for babies and toddlers, early interventionists

can provide guidance to families regarding available services and tools. Services listed in IDEA include “(a) evaluation of the needs of a child; (b) purchasing, leasing, or providing for the acquisition of a device; and (c) training or technical assistance in the use of a device for a child or for professionals” (Moore & Wilcox 2006, p. 16).

Students diagnosed with learning disabilities may experience reading difficulties. Edyburn (2003) advocated the use of universal design in the general education classroom as a means for students to access the curriculum in a variety of ways. Reading text can be facilitated by the use of supportive aids such as screen magnification, text-to-speech software, and electronic word tools. Furthermore, Edyburn cited research by Rose and Meyer (2002) that promotes the “need to have curriculum, instruction, and assessment (C-I-A) materials in a digital format. When C-I-A materials are available in a digital format, a wealth of possibilities are available for manipulating the information into formats appropriate for individual learner’s needs” (as cited in Edyburn, 2003, p. 12). Instructional technology is a beneficial means of providing academic content to students in ways that complement their learning styles.

Incorporating universal design principles into the home, school, and social setting allows all people, not just those with disabilities, to benefit from increased access to course content, materials, and facilities. For example, universal design has enabled the developers and the manufacturer of the MySchoolDayOnline AT scheduling tool to encourage its use by anyone who needs it, regardless of ability (Sapp, 2007). Universal design should continue to be incorporated in AT so that maximum potential can be realized for all users.

Online Learning

Today's teachers need to find new and innovative ways to reach and teach students in ways that are familiar to them. Online education allows students to access a wide variety of educational experiences and navigate their learning at their own pace. According to the National Primer on K-12 Learning,

online learning has many definitions but is marked by being a web-based, educational delivery system. Online learning is characterized by a structured learning environment, to enhance and expand educational opportunities, providing instruction that is teacher-led, and may be synchronous (communication in which participants interact in the same time space such as videoconferencing) or asynchronous (communication that is separated by time such as email or online discussion forums), and accessed from multiple settings (in school and/or out of school buildings). (Wicks, 2010, p. 11)

In addition, online learning can be broad in scope or can supplement traditional educational content. Online learning provides expanded educational content for students and access to courses that might not be offered by their school system. For example, the Georgia Virtual School offers students in Grades 9-12 courses such as banking and investing, foundations of engineering and technology, environmental science, and oceanography. Students can receive online content in a variety of ways. Asynchronous instruction provides a benefit because it enables students to manage their time and allows them to work on assignments based on their schedule. Students are able to interact with their professors using methods such as the online school's discussion board, email, video-conferencing, and phone (Lips, 2009). Students who face challenges such as physical disabilities or travel schedule conflicts are able to seamlessly continue their knowledge acquisition process. Online education allows students access to

instruction tailored to meet their needs and learning style. Many online programs allow students to set the level of difficulty and increase challenges as they move up through the levels.

According to Lips (2010),

as many as 1 million children (roughly 2% of the K-12 student population) are participating in some form of online learning. Today, 27 states offer statewide virtual schools that allow students to take a class online, and 24 states and the District of Columbia offer students the opportunity to attend a virtual school fulltime. (p. 2)

Many school districts offer some type of online learning opportunity, and enrollment in web-based education programs is growing. There has been evidence that students are benefiting from having access to online learning programs.

When online courses are used to supplement face-to-face courses, teachers should consider how online learning can be integrated so that it enhances the existing content. Fish and Wickersham (2009) found that student aptitude and meaningful learning experiences should be incorporated into lessons so that students can use their problem solving skills to find answers. They further noted that online technology should be developed with a user-friendly design that attracts the learner to delve deeper into its offerings. Users like to see high-interest graphics, flash animation, videos, and links to additional online resources when accessing online courses.

Salmani Nodoushan (2008) found that a disadvantage to online learning in developing countries is the lack of an internet infrastructure to support education applications. It can also be difficult to detect cheating using online learning programs. In addition, the lack of human contact can be a challenge for some students who may need the support of their teacher's voice, eye contact, and body language. Conversely, teachers may not be able to easily detect when a student needs more support and a change in instruction method.

Commercial Online Learning Products

Several web-based companies have designed products that integrate games into the learning process. Playing computer games while learning allows students to actively engage their minds and have fun in ways that are meaningful to them. Learners must add new knowledge to previously learned information and find the right tools in order to solve dilemmas. Educational computer games allow users to be action oriented, develop theories, and solve problems (Rosario & Widmeyer, 2009). Users can develop increased hand/eye coordination and quickly process information that is presented to them. In addition, tying computer games to learning provides a competitive challenge to students and may motivate them to learn academic content in order to achieve a high score (Van Eck, 2006).

A key competitor in the area of online learning is the A+nyWhere Learning System by American Education Corporation (n.d.). The program consists of content that limits all study activities to a single concept, practice tests allow for the review of previously presented content, and mastery tests determine if students have truly acquired an advanced level of understanding. Students are also able to demonstrate advanced cognitive skills by writing essays on content. Other competitors include Apangea Learning (n.d.) who introduced Apangea Math: Problem Solved, Educational Options (n.d.) who introduced Orchard Learning: A Complete Pre-K—12 Curriculum Solution, and Online Instructional K-12 Learning Solutions - Skills Tutor E-learning by Houghton Mifflin Harcourt (n.d.).

CHAPTER 3

METHODOLOGY

This mixed method study identified themes that emerged from studying several special education middle school reading teachers' experiences using Study Island to enhance the literacy capabilities of male students in their special education resource class setting. The purpose of this study was to determine the day-to-day practices and strategies the teachers utilized to help boys increase their reading comprehension. It also sought to detect the teachers' feelings and perceptions as they learned what worked and what did not work in engaging the boys' interest with Study Island questions and video games.

The male students the teachers were charged with instructing were members of my middle school's sixth, seventh, and eighth grade resource reading classes. The boys had psychological diagnoses such as specific learning disability, OHI, EBD, and autism. The timeframe of the research period spanned two months. During that time, the teachers were interviewed and their comments were formulated into a conversation narrative format. In addition, reports with statistics generated from Study Island were reviewed in order to track student trend data.

The following questions were investigated in this study:

1. What types of experiences do middle school special education reading teachers have when they teach lessons using Study Island?

2. Does using the interactive features of websites such as Study Island increase middle school boys' reading fluency and comprehension?
3. To what extent does playing video games on educational websites such as Study Island engage or fail to engage middle school boys' interest in reading fiction and non-fiction content?

The Researcher

During the 2011-2012 school year I was a full-time seventh grade special education teacher in the middle school setting of this study. I completed this study as part of my doctoral program. I taught at the middle school site for five years and spent two prior years at another middle school in the same school district. I facilitated resource reading classes at the middle school site during previous years and taught four social studies classes and one team-taught reading class during the research period. I conducted this study because I wanted to know if an online education program that incorporated a video game component increased boys' interest in and understanding of reading passages. In addition, I have seen how underachievement affected my male students' success both inside and outside the classroom. I have seen the damage that apathy and boredom can cause and how a negative attitude towards reading squelches a curious mind. I have taught boys who only see themselves as successful on the football field and have less regard for obtaining good grades. I attended my students' football games because I wanted them to know that I cared about them. I tried to encourage my students and have tried to leverage their personal interests in my reading classes by creating lessons based on the topics that interest them (e.g., *Sports Illustrated* magazine articles and military survival methods). I continue to want them to perform well academically because education is the key to upward and

social mobility and I want them to increase their chances to have successful personal and professional lives.

I selected Study Island as the focus of my research because I was searching for effective best practices that my teacher colleagues and I could use to reach boys who are not academically inclined or who struggle to read due to cognitive challenges. Although I used Study Island, this research is meant to explore the effectiveness of any similar tool. Based on my own teaching experience and observations, I believed that male students would be more apt to answer the Study Island questions correctly (instead of guessing) because they would want to quickly get to the video game component of the application. Therefore, their minds would be more engaged in processing, comprehending, and determining the appropriate answer to the multiple choice questions. In addition, I believed that teachers would like incorporating Study Island into their lessons because they would be able to easily determine their students' literacy progress. I believed that teachers would also appreciate the use of Study Island reports because the data would let them know each student's comprehension strengths and weaknesses related to specific state standards. Therefore, teachers would be able to design lessons based on strengthening targeted skills as opposed to conveying generic information. I felt that these actions, in turn, would allow the male students' true capability to be accurately reflected on state tests. With these actions, I searched for insight into the true experiences of my teacher participants. I asked my teacher participants probing but not leading questions and strove to be vigilant about not interjecting my own bias or perceptions into the queries.

Research Design

A mixed method study design was chosen to answer the proposed research questions. Fraenkel and Wallen (2008) stated that a mixed method study allows researchers to use both

quantitative and qualitative procedures in the same study and enables them to compile and examine different types of data. Mixed method studies can accentuate one procedure over the other or give both procedures equal parts. Study Island features interactive question and answer pages and video games. During the study I made observations of the male students' behaviors while using Study Island and took field notes. I also observed the teacher participants' interactions with their male students and later interviewed the teacher participants in order to gain more insight into their experiences as they delivered their lessons and reviewed lesson outcomes.

I sent emails via my school district's secure information technology network in addition to conducting personal interviews with my participants. I did not conduct focus groups because my participants had different planning times. Although I kept my participants, school principal, and Instructional Support Teacher (IST) informed of my activities, no protected information was released. Please note that the names I have used to identify the teachers are not their real names.

Participants

The teacher participants in this study included Sarah, the sixth grade Services for Exceptional Children (SEC) reading teacher. My middle school was her first and only teaching assignment. In addition, she served as SEC department co-chair during the research period's school year. The seventh grade reading teacher, Noni, had been teaching for 16 years. She had previously taught at another school in the district and transferred to my middle school one year ago. She taught reading with the seventh grade resource language arts teacher, Maria, in a combined 104 minute block (52 minutes each). The eighth grade reading teacher, Catherine, had been teaching 10 years. During the research period's school year she also served as the second SEC co-chair. It is noted that these are pseudonyms; not the participants' actual names.

The male students who used Study Island were members of the middle school's resource reading class. They had varied ethnic backgrounds and ranged in age from 11-15 years old. They were in a resource reading class because their literacy aptitude was several years below grade level. The resource classes emphasized fiction and expository (non-fiction) reading selections and the reading content included novels and short stories. The students were taught strategies that helped them gain an understanding of plot, characters, conflicts, and resolution. They were also provided methods to identify the correct answers to questions. Teachers provided instruction outlining how to read for detail, recognize the main idea, discover the meaning of words using context clues, determine the sequence of events, and identify cause and effect actions. The students were also instructed on ways to decode multi-syllabic words using phonics and whole language techniques.

Context and Access

The middle school participating in this study was located in a suburban section of a southeastern United States metropolitan area. Although technically designated suburban, the middle school was located in an area that included a large shopping and restaurant district. For example a Kroger grocery strip mall complex (housing establishments such as a Hallmark card shop, a Roaster's Rotisserie Chicken restaurant, and a Chinese restaurant), Wal-Mart, Target, Costco, Home Depot, Lowe's, Kohl's department store, and Fry's electronics store were all within walking distance. According to the most recent demographic data released by this school system, during the prior school year 1,191 students were enrolled at the middle school. This racial breakdown was 64% Caucasian, 16% African American, 9% Hispanic, 6% Asian, and 5% multiracial. A chart containing this demographic information is presented in Figure 1.

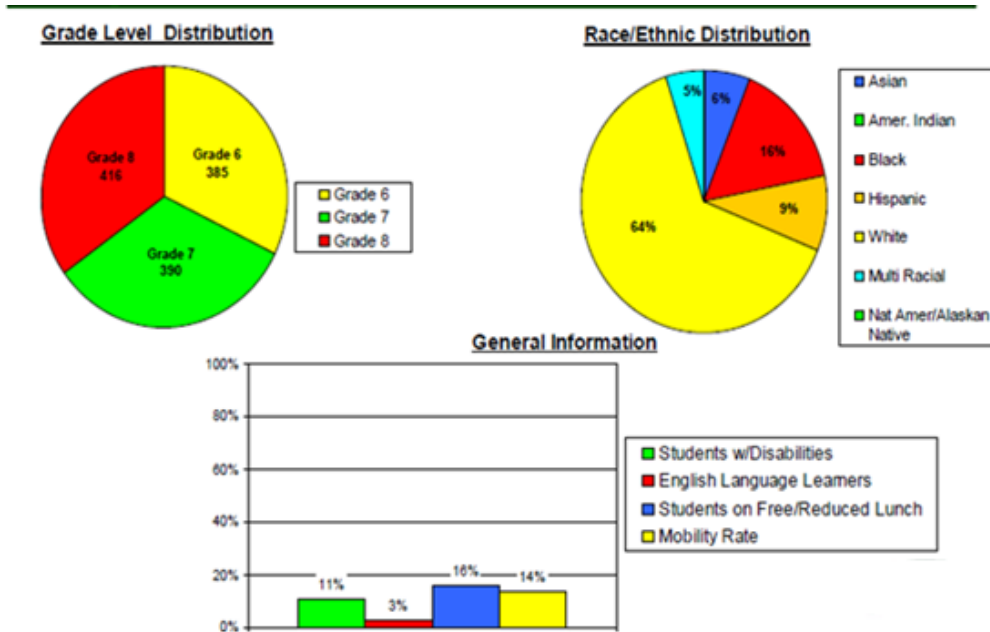


Figure 1. Middle school profiles.

The middle school operated under the authority of a county school system and each grade level's student body and faculty were divided into three distinct groups (Teams A, B, and C). The SEC teachers and students were cross-teamed with general education instructors. The principal oversaw the school as a whole and focused on building-wide issues while three assistant principals supervised the day-to-day activities of the grade levels under their purview. In addition, the seventh grade assistant principal was responsible for curriculum and student testing. An IST was charged with overseeing the delivery of the special education program at my school and for managing the activities of the teachers.

The architectural design of the school separated the grade levels in designated halls so that students did not interact with one another except on the bus and when they were gathered together before and after school. This middle school also housed a severe and profound special

education center in order to serve students with those types of disabilities. Special education teachers certified in that exceptionality provided instruction to these students with help from paraprofessionals. Class periods were 52 minutes and the day began at 8:30 am with students meeting in their homerooms for 10 minutes in order to receive daily announcements and administrative information.

Procedures and Data Collection

Prior to the study, I obtained Institutional Review Board (IRB) approval to conduct the research. I also conferred with the teachers to obtain general lesson plan information and used already gathered data in order to assess the current academic ability of the male students. This was done in order to gain a clear understanding of the contextual factors. In addition, I met with the school's principal and the special education director to discuss the research project. I developed a standardized form to use during the teacher observation so that data were recorded accurately and consistently. In addition, teachers were interviewed regarding their experiences teaching the male students and their perception of Study Island use in their lessons. Sample interview questions included

1. When your learners engaged in Study Island, what differences, if any did you notice?
For instance, were there changes in engagement, achievement, and comprehension?
Please describe those for me.
2. After reading Study Island report data, what strategies did you use to increase your students' understanding of identified weaknesses?

I provided the interview questions in advance so that the teachers had time to formulate their answers. By assessing the answers to interview questions and comparing Study Island pre- and post-test data, I was able to evaluate the efficacy of Study Island on male student literacy.

Data Analysis

This mixed method study was conducted using various validation procedures in order to ensure that the research was credible (Creswell & Miller, 2000). I used my personal lens as the researcher to make decisions. I utilized my logic and cognitive processes in order to determine the participants, set the parameters of the study, and make the necessary arrangements to bring the study to fruition. In addition, I identified the categories and themes that emerged based on the results from the study. The use of the middle school's secure email system allowed me to explain to my participants any themes that emerged. The email system also enabled me to quickly communicate with participants information such as interview times and helped me clarify any comments that were made.

The primary lens of this study was that of the participants. I used the lens of my participants to check the validity of my data. Member checking was rigorously conducted in order to ensure that the participants' words were accurately conveyed and their sentiments were correctly expressed. I continuously provided prompts such as, "This is what I heard you say," and "Please tell me if I have written this down correctly." I kept participants apprised of my actions every step of the way via email and personal contact so that they knew the research status. Their support and trust was paramount to the success of my research and I valued their faith in me as a colleague.

CHAPTER 4

ANALYSIS OF THE DATA

The three special education reading teachers at the middle school each had their own method of providing literacy instruction to their students. The school system provided the teachers access to Study Island training during pre-planning week, and they took advantage of the opportunity. This training allowed them to become familiar with Study Island, and the company's representative provided strategies on ways to implement the program into the day-to-day delivery of content. As the time for state testing grew closer, the school's administrators reminded all teachers that Study Island was available for student test preparation.

During the 2011-2012 school year, the sixth grade and eighth grade reading teachers, Sarah and Catherine respectively, decided to both teach the second period sixth graders so that the students would have the opportunity of two teachers available providing instruction and assistance. Sarah and Catherine decided to combine the classes because they both had all boys during the same periods and they thought this particular population would provide a unique opportunity to see if Study Island added benefit for literacy growth. Also, Catherine wanted to teach the low ability students and Sarah wanted to teach the higher ability male students. The principal and the special education IST supported this plan.

The sixth grade students' second period class met in Catherine's eighth grade classroom. There were 12 male students in the classroom, and it was equipped with eight computers.

During second period there was also a teacher's assistant assigned to the class to provide additional support. Sarah and Catherine started the school year teaching verbal sounds and blends. Based on their observations and reading benchmark tests, they were able to determine that three students read at the fifth grade level and would probably be moved into a team-taught class for their seventh grade year. The remaining students read at a third and fourth grade level.

Noni, the seventh grade resource reading teacher, provided reading instruction during a combined two period reading/language arts block schedule. Noni and the language arts teacher, Maria, provided instruction in reading during fourth period and language arts during fifth period. Since Maria provided language arts instruction, she was not included in this research study because she had primary responsibility to provide guidance in the writing process, and she did not use Study Island during her lesson periods. The block schedule was authorized to provide intensive support for resource students with low cognitive and academic abilities.

Organization of the Research Study

In order to have a full understanding of the impact that Study Island had on the three teacher participants, each one was observed and interviewed approximately six to eight times over a two month period, depending on their availability. This research study began on February 9, 2012, and ended on April 11, 2012. During that time I met with the teachers during their planning periods or before their school day began. I also watched as they conducted their reading classes so that I could learn how they implemented Study Island with their students.

When I interviewed the teacher participants I documented their responses to my questions on paper and repeated what I had written to make certain what I heard them say was correct. I asked questions such as

1. Had you ever used Study Island prior to this school year?

2. What is your experience using technology in the classroom?
3. Has the use of Study Island in your reading lessons changed your view of technology in the classroom?
4. Do you plan on using Study Island in the future?
5. Has the use of Study Island increased your male students' interest in reading fiction and non-fiction material?
6. What type of behavior did your male students exhibit while they were using Study Island?

This chapter is organized to tell each teacher's story and my own, as I was brought into this research study when I was asked to introduce Study Island to the seventh grade reading resource students. After each interview I reviewed and sorted my notes and then organized the teachers' responses in order for recurrent themes to emerge. I then received scrubbed Study Island report data in order to code the anonymous student data to determine if there were reading increases. In order to have consistency among the grade levels, I used the data for the reading skills of Context Clues and Main Idea. The sixth and eighth grade resource students had completed these two modules. The seventh grade resource students were only able to complete the Main Idea module due to distractions caused by negative behavior.

Research Questions

During the research period I sought to gain an answer to this study's research questions. The main research question is Number 1. The two supporting research questions are noted in Numbers 2 and 3.

1. What types of experiences do middle school special education reading teachers have when they teach lessons using Study Island?

2. Does using the interactive features of websites such as Study Island increase middle school boys' reading fluency and comprehension?
3. To what extent does playing video games on educational websites such as Study Island engage or fail to engage middle school boys' interest in reading fiction and non-fiction content?

Catherine's Story: Eighth Grade Teacher

During the 2011-2012 school year, the eighth grade teacher, Catherine, had completed 10 years of teaching and was one of the original teachers at the middle school when it opened seven years ago. Prior to working at this middle school, she taught at a nearby middle school in the same neighborhood cluster. She wanted to become a special education teacher because she liked working with that particular population. She said, "I love teaching reading because all the other content areas are related to it." She also said that "I can use my imagination to design lessons that are of interest to my students, and I'm able to cover the performance standards in interesting and fun ways." At the end of the 2011-2012 school year Catherine was awarded the honor of being the middle school's Teacher of the Year and at the ceremony the principal talked about the impact she has had on the school's entire reading program.

Inside Catherine's Classroom

Catherine shared a classroom with four other special education teachers due to space limitations at my middle school. All the special education teachers in the building had to share their rooms with two to three other teachers. In Catherine's classroom, each teacher had his or her desk and personal items set up in a corner of the room. Two other eighth grade special education teachers taught classes in the room but the overall set up of the room was for Catherine's use as a reading center. Catherine had bookcases placed in various parts of the room

that held a selection of various types of leisure reading material. The room was set up for computer usage with eight desktops available. These desktops were situated on tables, which were located in the center of the room. In addition, Catherine sectioned off a small portion of the room so that students could have a small space in which to get comfortable on the floor and read a book. She also had posters hanging from the wall promoting reading. Her classroom was a warm, inviting place where students could relax and enjoy the reading process.

Special education students flowed in and out of the classroom at all times of the school day because they knew this room was their safe zone. Catherine and the other special education teachers spent time with their students before and after school helping students with projects, answering questions regarding assignments, and providing one-on-one assistance. There was a warm relationship established between Catherine, the other special education teachers, and their students that was palpable. Laughter was frequently heard coming from the room and students were known to stay after school to help their teachers straighten up and prepare for the next day.

Previous years' students were also known to stop by to say hello to their former instructors and they would provide insight regarding their experiences at the high school level, which the teachers would then pass on to the current eighth graders. For example, after one visit, Catherine said to her students,

I had a former student visit me and he said, "Miss Catherine, you were right, high school is no joke! All that stuff you told us about high school was true! I needed to study hard for my end of course exams." You all think we're exaggerating about how rigorous high school is and what it takes to graduate. You all need to get disciplined now!

Catherine's View of Study Island

Catherine was an early adopter of Study Island and began incorporating it in both her resource reading classes (second and eighth periods) in December, 2011. She stated she refreshed her memory from the training that was provided during pre-planning week (August, 2011) by “playing around in the system.” She said, “I would sign in and click on the menu buttons to see what it would do. Then I would look at the reports to see what information was available.” Navigating around the system provided her insight into how Study Island worked and ways she could use its data to track her students’ progress. In addition, she created a spreadsheet that allowed for the recording of her students’ Study Island scores so that they could see their growth over time. She said,

I wanted my students to be able to see for themselves their progress. The only way I could think to do that was to create a spreadsheet and write their scores down so that they would know their reading ability was getting better. I looked at the Study Island modules and then listed the information on the spreadsheet so both they and I would know that each reading skill was covered.

Catherine was a huge proponent of Study Island and said,

Next year I will start using Study Island at the beginning of the school year (2012-2013) so that I can take advantage of its benefits more fully over time. Also, the students will get used to answering multiple choice questions earlier in the school year.

During the 2011-2012 school year Catherine used Study Island as a culminating activity for each reading skills unit. For example, when she and Sarah taught a unit on Author’s Purpose they introduced the new skill, taught several lessons on ways to identify what the author intended, provided independent practice sessions on the skill, and then had the students access the Study

Island Author's Purpose module. She stated, "Study Island provides benefit because it gives multiple chances for scoring opportunities and immediate feedback so the students know how well they understand the reading passages and questions."

Catherine's Study Island Implementation

During the 2011-2012 school year Catherine taught two resource reading classes. She and Sarah (the sixth grade teacher) provided instruction to the sixth grade male students during second period in her eighth grade classroom in order to take advantage of the computer stations. There were 12 students in the second period reading class. In addition, she also provided instruction to eight students (seven boys and one girl) during eighth period. Both these classes were structured the same way. For example, during an observation of Catherine's second period class I noticed she split the boys in two groups (worksheet/novel study and Study Island) due to the limited number of computers. The class was organized so that she provided instruction on the worksheet or novel study that was taught and the assistant went around the room to help the students using Study Island. Catherine made sure she was fully engaged in both groups' activities and provided game-playing strategies with statements such as "Be careful when you play that particular game because if the car crushes you it counts against your score."

During the class Catherine or the assistant gave each student his personal scoring spreadsheet so that any new score could be recorded. Catherine and the assistant walked around the room and provided positive feedback such as, "Wow! You made the High Score Table!!! Way to go!!!" and would prompt them to move on to the next module. When the time came for the boys to switch (after approximately 20 minutes) the same actions occurred with the new group of students. Catherine liked to end her class with some kind of fun activity such as asking

the students to sing an Author's Purpose song she found on the internet into a five foot tall microphone she brought from home.

Catherine noticed that when she introduced the boys to Study Island in December 2011, the students who had used the program in earlier grades did not want to do it. However, she said, "When I said they could work in game mode they had immediate buy-in." All the male students did not complete their Study Island pretest module and a few also did not take their scores seriously until she told them that their highest score in the reading skills modules would count as their grade. She then showed each student her teacher's page with his individual usage so he knew she was aware of their every action. Once Catherine did that she said, "They had a fire under them. They wanted to be sure I knew they had tried their best and wanted me to praise their effort."

When Catherine later created the scoring spreadsheets, their motivation level increased even more. She said, "They were then in competition with themselves to get the highest score they could obtain." In addition, before the introduction of headphones for all users they would attempt to engage in horseplay. After the headphones were introduced there were no distractions to break their concentration. Catherine stated, "The second period sixth grade students are an exceptionally well-behaved class. They are focused on the lessons and on completing their assignments. I don't have any behavior problems from them. They are a very mature group of students."

When Catherine started using Study Island in December 2011, she was not very familiar with the program and did not have a specific process in place in regards to how she wanted to track progress. She had two students complete pretest questions because they had finished their regular coursework early and she wanted to check their skills levels but the remaining students

started immediately with their reading modules. However, at the end of the Study Island implementation period, she knew what she wanted to check for improvement so she had all her students complete post-test questions. Catherine reviewed the scores at the end of the Study Island implementation period and noted that seven out of 12 students achieved passing scores of 70% or greater (Table 1). This was gratifying to her. She stated,

Based on my observations and my spreadsheet records I knew that my students' reading ability had increased over time but it's great to have actual Study Island data confirm my opinion. All my boys' reading fluency and comprehension skills got better. It's great to see that one student went from a 55.6% pretest score to an 85.7% posttest score. Best of all, one student's pretest score was 78.6% and he ended with a post-test score of 93.3%.

This tells me that the students should do well on the CRCT and their reading increases should help them progress academically.

Table 1

Sixth Grade Reading Pre- and Post-Test Results

Male Student	Pretest Sessions	Pretest Correct/Total	Pretest % Correct	Posttest Session	Posttest Correct/Total	Posttest % Correct
1	1	5/9	55.6%	1	12/14	85.7%
2	0	0	0	1	18/20	90.0%
3	0	0	0	1	17/31	54.8%
4	0	0	0	2	35/55	63.6%
5	0	0	0	1	12/20	60.0%
6	0	0	0	1	18/20	90.0%
7	0	0	0	3	27/56	48.2%
8	2	11/14	78.6%	1	14/15	93.3%
9	0	0	0	1	20/26	76.9%
10	0	0	0	1	14/20	70.0%
11		0	0	2	17/24	70.8%
12	0	0	0	1	6/13	46.2%

In addition, Catherine stated that Study Island provided her with the information she needed in order to teach content that required particular emphasis or remediation. For example, during class while the students were using Study Island, she looked at their activities in “Live View” so that she could watch their percentages, check the reading skill they were working on, see how they were scoring, and track their time to see if they were not working on the activity. She then let them know she could see what they were doing. For example, if a student had only completed three questions in 20 minutes she would say to him, “You’re wasting time and you need to get busy.” That would get him jumpstarted so he could begin to move forward.

Study Island allowed the students to retake the questions in a reading skill module until they reach a cumulative passing score, which was displayed in the color green as “Completed.” Study Island had features that allowed teachers help students who needed special education support. These features enabled teachers to turn on options within the program to reduce the number of selections (from four to three) for the multiple choice questions and activated oral reading functionality so that students could hear the reading passages, questions, and choices. In addition to turning on both these options, Catherine increased the passing percentage score for her students. Generally, students were able to pass the state of Georgia’s CRCT with a score of 60% in each content area. Study Island passing score was 70%. Catherine set her students’ Study Island passing score at 80%. She said, “I set the bar high so that my students can truly progress in their reading ability. If they can pass their Study Island modules at 80% then they should be able to pass the CRCT.”

Catherine stated that she could easily measure her students’ progress based on her personal observations and through analyzing Study Island reports. She stated, “I really like the program because the questions and options are written in the language of the CRCT so my

students become familiar with that kind of language.” When asked if she had any issues with the program, she stated,

I would prefer that the students *have* to get the answer to a question correct the *first* time they select an option before they can play a game. Currently, a student can select a wrong answer and get a chance to try again. When they finally select a right option they can then play the game. I would prefer that students lose the right to play the game when they select the wrong option because they quickly learn that they just needed to keep selecting A, B, C, or D and eventually they click on the right one.

Catherine heavily relied on Study Island reports functionality. She particularly liked the reports that identified students’ individual reading skills scores, the number of questions that were missed, and the number of blue ribbons that a student achieved. She noticed that the competitive streak was activated in students who did not want their overall scores to be low so they would strive to earn blue ribbons. She stated, “Earning blue ribbons are a huge motivator for my students. They like to visually see that they have been awarded a blue ribbon.” The boys liked to answer their questions in game mode. In addition, as a motivation strategy, Catherine would tell the students, “You need to first complete the 10 question modules in game mode and then do it again in test mode.” She further stated, “Structuring the usage in this way allows students to become immersed in what they were doing and they receive immediate reinforcement because the questions are harder for them due to their low skill level.”

During the course of the school year Catherine provided in-depth lessons on the reading skills of Context Clues and Main Idea. At the end of these units Catherine had her students answer Study Island questions. Some students were faster than others but they all were able to complete these two modules. Although some students scored in the lower percentages she was

pleased to see that a few were able to score at or above 80% (Tables 2 and 3). Based on these results she knew how to proceed forward in subsequent modules. She said,

Based on their behavior and their scores I could see which students needed additional help and which ones had the confidence to move forward. For my struggling readers I would provide prompts that would help them figure out the answer. Also, if a student continued to struggle I would tell them to move on so that they wouldn't be frustrated and provide them further explanation and support. My more advanced students had the knowledge that they could handle more challenging work.

Table 2

Sixth Grade Context Clues Results

Male Student	Items	Score
1	11	36.4%
2	25	52.0%
3	10	80.0%
4	30	60.0%
5	31	80.6%
6	26	84.6%
7	25	48.0%
8	13	84.6%
9	25	68.0%
10	27	81.5%
11	21	76.2%
12	37	56.8%

Table 3

Sixth Grade Main Idea Results

Male Student	Items	Score
1	10	90.0%
2	44	50.0%
3	44	50.0%
4	105	55.2%
5	116	70.7%
6	57	75.4%
7	83	42.2%
8	54	70.4%
9	107	57.0%
10	34	64.7%
11	57	86.0%
12	35	63.6%

Catherine conducted her classes in an organized manner so that her students knew her expectations. She explained how she would conduct a typical class:

The students prefer to work in the games mode setting. I allow them to select the game they want to play. The games are geared for users on a beginner, intermediate, or challenging level and their choices include options such as memory, skate park, basketball, or bowling. In addition, they can create an avatar for the game they have chosen. I have the students use headphones when they work in game mode because even when they were not using the oral reading functionality the sounds of the bleeps and pops are distracting to others. The use of headphones is also a good classroom management strategy because it keeps the students' attention focused on the computer monitor and they are less likely to interact with one another.

Catherine noticed that the students in both classes liked certain Study Island modules more than others and their ability to answer the questions correctly on their first attempt increased over time. She stated,

The students preferred the Poetry and Rhyme Scheme module because the questions were shorter. Most of the students passed this particular module on the first try. It was easier for them to understand the questions. Also, familiarity with the content increased their aptitude. We went over poetry and rhyme scheme several times in class before the students worked in Study Island. In addition, my students have now used Study Island so much that their usage has become a well-oiled machine. When they arrive to class the students who are assigned to the computers as part of the first group know to get their headsets, turn on the machines, and start working on their assignment.

Catherine noticed extinguishing factors as she continued to use Study Island over the course of the school year. When she first began using the program in December 2011, the students in both grade levels were enthusiastic. However, over time she noticed that some of their enthusiasm waned and she used strategies such showing them their scores so that they could see their progress as a motivation tactic. She said,

This strategy is particularly helpful with my eighth grade students because they want to receive a Level 3 (*exceeds expectation*) on the CRCT. The eighth grade teachers have told all the students that if they achieve a Level 3 they will not have to take the end of course test for the content area they exceeded. This is a *huge* motivator for both general and special education eighth grade students.

In addition, Catherine stated that the eighth grade special education students were provided information regarding a transition to adulthood plan as part of their IEP high school counseling sessions. Based on these conversations she stated,

Many of the students realize that, at this point in their lives (approximately 14-15 years of age), they need to truly start thinking about their future. Both the resource and team-taught students realize that they should strive to advance out of the special education program because the notation on their transcript might be viewed unfavorably by certain entities (e.g., the U.S. military). Several of my students have expressed that they want to serve our country in the Air Force so they want to eventually be dismissed from receiving special education services when they no longer need the support.

Catherine chose to bypass having her eighth grade students complete Study Island pre- and post-tests and instead decided to immediately focus on reading skills in order to maximize their time in her classroom and skills-based activities. Both the sixth and eighth grade lower ability students got more frustrated than the higher level ones when they struggled to successfully to pass a module. When they struggled with the longer reading passages and got discouraged, Catherine would let them take a break and try something different. When students resumed the difficult module, she would work with them until they achieved a passing score.

Catherine said, “When I showed them their progress they got a better attitude.” Catherine stated,

I would like to have the option for the Study Island modules to use a student’s last score instead of averaging it into a cumulative score. The students feel frustration because even though they might have achieved an 80% on their last attempt the score in Study Island will show a lower cumulative amount and the module would be listed in red as

“Incomplete.” At that point I write down the last score on the spreadsheet, tell them to ignore red “Incomplete” and let them to move on to then next module.

Catherine stated at the end of the research period all the students’ reading scores indicated growth over time. All of the male students completed the Context Clues module and most of them completed the Main Idea module (Tables 4 and 5). Catherine said, “Although the eighth grade students did not have scores as high as the sixth graders they did show overall improvement when I used Study Island *and* worksheet assessments.”

Table 4

Eighth Grade Context Clues Results

Male Student	Items	Score
A1	63	63.3%
B2	11	45.5%
C3	9	77.8%
D4	25	48.0%
E5	1	100.0%
F6	7	42.9%
G7	7	85.7%

Table 5

Eighth Grade Main Idea Results

Male Student	Items	Score
A1	0	0.0%
B2	14	50.0%
C3	8	62.5%
D4	41	48.8%
E5	0	0.0%
F6	0	0.0%
G7	7	71.4%

Catherine's staff improvement plan goal for the 2011-2012 school year identified her desire to incorporate more technology in her classroom. That is why she made certain the maximum number of computers (eight) that could comfortably fit in the room were installed. In addition, she stated that she planned to continue using Study Island as part of her lessons after the CRCT ended on April 18, 2012. She said, "I plan to teach guided instruction lessons three days per week (Monday through Wednesday), one day of independent reading with journaling (Thursday), and one day of Study Island lessons (Friday) during the 2012-2013 school year."

Noni's Story: Seventh Grade Teacher

The seventh grade resource reading teacher, Noni, had 16 years of special education experience. Prior to joining the staff at this middle school, she previously worked at another middle school in the same geographic cluster. The majority of her teaching career had been spent working with the at-risk high school population. She said, "I like working with special education students because I enjoy helping them learn academic content and motivating them to stay in school."

Noni was not comfortable using any form of technology and preferred to use non-digital tools such as note paper when there was a need to record information. She used programs such as the Microsoft Office suite of products (e.g., Microsoft Word, Microsoft PowerPoint, and Microsoft Outlook) because these tools have become standard in 21st century America, and they are needed for everyday functioning in the workplace. Thus, incorporating Study Island into her lessons took her out of her comfort zone. However, she knew that Study Island might be a benefit to her students, so she was willing to learn how to use it and implement it with her students.

Noni's View of Study Island

Noni had not used Study Island before the 2011-2012 school year. When asked about the program, she said, "I know it's a technology tool to help students independently practice for the CRCT but that's all I know about what it does." She also had never used a similar online education program, so she did not have any knowledge about this kind of tool. Noni attended the Study Island training session that was offered to teachers before the 2011-2012 school year started. However, after training she had no plans to use it because she wanted to be totally comfortable and familiar with its usage before incorporating it into her lessons. When asked about her opinion of the training session, she said, "I liked it because it was very intuitive, teacher friendly, and great for novices."

Inside Noni's Classroom

Noni conducted her resource reading class in a room that had 10 computers situated on long tables on two walls. Noni and Maria (the language arts teacher) had their desks placed on opposite sides at the back of the room. A third special education teacher had her desk located on the side of the room that did not contain computers. Because this room was designated as a computer center, only reading or language arts courses were taught in this setting. The bulletin board displayed current student work and Noni and Maria also set up a small area, sectioned off by bookcases on either side (to give the appearance of privacy), where a rocking chair was placed on top of a rug on the floor. The bookcases were filled with all kinds of reading literature. Noni and Maria encouraged students to get books, get comfortable on the floor, or sit in the rocking chair when time permitted.

Noni's Students

Noni's fourth period resource class comprised four male students and two female students. These students had very low cognitive and reading abilities. Two of the boys and one of the girls exhibited extreme negative behavior traits. Because they had been diagnosed with disabilities at an early age and lived in close proximity to one another they had been in the same classes together for years. They knew which buttons to push for maximum antagonism, so by the time they reached seventh grade they were tired of each other. Therefore, they were very disruptive (e.g., calling out without permission, talking to one another across the room, and making inappropriate comments). They were defiant when reprimanded and Noni said when she would reprimand them they would respond, "We only act like this in small classes. We wouldn't act like this in the bigger classes."

In addition, the second female student was autistic, and she would frequently blurt out curse words, touch student items without permission, and touch the boys in an inappropriate manner. Her behavior would cause the three challenging students to get upset and Noni stated they would frequently yell out, "*You always get on us for doing stuff but you never get on her!!! It's not fair!!!*" Due to her anger the challenging female student would sometimes cry and leave the room without permission, which would get her in further trouble. Noni stated,

Maria and I would try to explain that the autistic student couldn't be held to the same level of responsibility because she didn't have the same level of reasoning. I would tell them that they *knew* better and that's why they would get in trouble and the autistic student would have a different kind of consequence. However my explanations didn't do anything to alleviate their frustration level and they used it as an excuse to act out.

Due to these factors, Noni and Maria utilized creative behavior management strategies to get the students compliant and open to instruction. One successful strategy they used was to give laminated tickets for positive behavior and favorable academic performance. Noni explained,

The students were responsible for bringing us their sheet with their tickets at the end of each class period. Maria and I would record each ticket that a student received on their sheet. The tickets were redeemed at the end of the week for candy and other prizes such as small toys. For example, the students loved to eat beef jerky so they were able to redeem five tickets for a beef jerky strip. These particular students were highly motivated by the tickets and would constantly ask us, “Do I get a ticket?” when they performed an action and “Have you gone to the grocery store?” when the prize cache got low. The ticket system helped improve their behavior a little bit because if they acted poorly we would take tickets away.

Noni’s Study Island Implementation

When the school’s administrators encouraged teachers to use Study Island for CRCT prep, Noni was open to implementing the program in her reading class with my assistance. I used to work in the healthcare information technology (IT) field and had no qualms about using online tools. In addition, Noni knew that I was always available to help her if she needed technical assistance. Noni, Maria, and I scheduled a time to meet and I showed them how to (a) log into Study Island, (b) set up a class under their profiles (e.g., fourth period Reading), (c) select students and link them to the class, and (d) select Study Island modules (e.g., Context Clues). I then showed them how to navigate around the Study Island program. Noni especially liked the ability to reduce the number of multiple choice options and the oral reading functionality to fit the special needs of the students. She made sure that her students had these

supports turned on. I then showed them the students' view of the program and showed them how game mode operated. Both Noni and Maria had smiles on their faces when we finished. Noni said, "The students should really like this program because the modules contain the content that we covered in class."

On the day that Noni had planned to introduce Study Island for the first time, she unexpectedly had an appointment and needed to arrive at school around lunchtime. Therefore, Noni, Maria, and I agreed that I would introduce Study Island to the students so that they could remain on schedule. I taught five of the students in my social studies classes, and I saw the remaining student (the female student with the diagnosis of autism) several times on a daily basis because she had two classes in the classroom where my desk was housed. These students recognized me as their teacher regardless of subject matter. On the day Study Island was introduced, I explained the purpose of Study Island to them, told them what code to use for their login and passwords, and helped them log in for the first time. One male student was assigned his own laptop by the school system's assistive technology department due to his reading disability so I helped him enter Study Island web address in the address bar. The boys wanted to play around when they accessed Study Island web pages but the two girls appeared to be more focused on listening to my instructions. As he answered the pretest questions, I observed that one male student quickly determined that Study Island coding could detect a pattern of guessing. I heard him blurt out, "Hey, it can tell that I'm guessing." I responded, "You need to slow down and *read* the questions" and proceeded to guide him so that he had a better understanding of the reading passage and options.

When I introduced Study Island to the students I, too, experienced the same negative behavior that Noni and Maria faced on a daily basis. For example, several of them were not

listening to me as I provided instructions to them. They wanted to talk and horseplay around instead of focusing on my words and information about the Study Island pretest reading passages when they were in the program. I felt sadness because the students had, literally at their fingertips, a tool that could help improve their reading skills, but they were resistant to my efforts. Noni strongly felt that several of these students were *only* motivated by the games and could care less about achieving passing scores. She stated,

It's a good program but the games were the highlight of my students' lives and they act like they say to themselves "the games are my focus and I need to get the questions out of the way so that I can play the game." The students have told me that Study Island doesn't give enough time to play the games and that it should have more levels. They don't like the fact that they are only given approximately two minutes to play a game before they have to start a new question. In addition, the use of headphones doesn't stop these students from being distracted by one another. They tend to put the headsets on and off when they feel like it.

Unlike her students, Noni liked the fact that there was a time limit on the games. She was appreciative that Study Island was a new opportunity to use a different type of assessment instrument to track her students' progress. After I showed her how to use Study Island, she practiced using the program so that she had a better understanding regarding how it operated. Every time she used it she learned what it could and could not do, and she took the initiative to play the games herself so that she could view it from a student's perspective. She noted that the reading passages were long and the students sometimes got overwhelmed. However, she knew that this was also how the reading portion of the CRCT was written, so Study Island reading passages were realistic and were preparing them for that kind of testing scenario.

At the beginning of the Study Island implementation process, Noni and I asked her students to complete their pretest module. As previously mentioned, because of the behavior of several students she was not able to progress as quickly as she had initially planned. Over the course of the research study period the four male students achieved the pre-test results contained in Table 6. During subsequent lessons, Noni directed the students to access the module. They, in turn, would read a passage, play a game for a few minutes if applicable (because sometimes they would work in test mode), move on to the next question, and play a new game. None of the male students achieved a passing score.

Table 6

Seventh Grade Reading Pre-Test Results

Male Student	Pre-test Sessions	Correct/Total	Percent Correct
A	16	26/62	41.9%
B	15	48/97	49.5%
C	27	37/106	34.9%
D	5	14/45	31.1%

When the students finally finished their pre-tests, Noni reviewed their scores to see how they performed. She then asked them to complete the Main Idea module. The male students' results are presented in Table 7. Again, none of the male students achieved a passing score. Based on these scores, Noni knew the students needed a lot of remediation in the Main Idea reading skills. She subsequently taught lessons to reinforce the concept.

Table 7

Seventh Grade Main Idea Results

Male Student	Pre-test Sessions	Correct/Total	Percent Correct
A	15	15/66	22.7%
B	2	2/7	28.6%
C	3	6/27	22.2
D	15	11/56	19.6%

During the two month Study Island implementation period, Noni experienced challenges when she tried to get her students to complete the Study Island modules due to their non-compliant behavior. Because most of the students appeared to only be interested in playing the games, they did not take the lesson content seriously and they did not seem to be engaged. Noni stated, “Study Island could not be fully implemented in my classroom because of the behaviors. It also was not an effective behavior management tool because my students only wanted to play the games and they talked while they were playing instead of being focused on what they were reading.” When asked about extinguishing factors, Noni said, “There were none even though Study Island was used over a two-month period. In addition, its usage did not diminish over time because it never got fully established in the first place.” This was very disheartening to Noni because, she said, “I want my students to put forth their best effort and receive a tangible benefit. However, even though all of them had low scores I do believe that some of the material that was covered in Study Island was absorbed.”

On a personal level, over time Noni became more familiar with Study Island usage, learned how to access the reports, and “lost the fear” of using the program. She was glad that it was teacher and student user-friendly. She felt proud that she could use it independently and

thanked me for helping her. She said using Study Island provided her with the confidence to try new technological tools and that using the program lowered her technology anxiety in general. She said she would use Study Island again in the future but only *if* she determines that her students would be “well behaved, motivated, and focused.”

Sarah’s Story: Sixth Grade Teacher

The middle school’s sixth grade resource reading teacher, Sarah, had been teaching for nine years. She said she became a teacher because, after the birth of her niece who was hearing impaired, she had a dream that she was a deaf education teacher. This dream occurred during her sophomore year of college, and when she woke up, she called and informed her mother that she wanted to change her major to deaf education and graduated with that degree. She subsequently found employment at the middle school as a special education teacher and provided case management services to students with students with hearing disabilities.

Sarah’s View of Study Island

Sarah had not used Study Island before this school year. She was familiar with the program due to its introduction during a one-hour training class at my middle school during the previous school year, but she did not implement its usage in her lessons at that time. However, during the 2011-2012 school year she was open to incorporating Study Island as part of the reading curriculum due to Catherine’s encouragement. Since she and Catherine used Study Island in the second period resource class, she was comfortable using it independently with her fourth period resource students.

Sarah’s Second Period Class

When Sarah and Catherine decided to combine the second period resource classes she did not have an opinion regarding the use of Study Island in her lessons (either for or against). She

was willing to use Study Island because she knew that if her students enjoyed an activity they were more likely to be engaged. Prior to combining the classes she experienced discipline problems such as students calling out without permission, making inappropriate comments under their breath, and so forth. When the classes were combined, the behavior problems ceased. She attributed this change to the fact that there were two certified teachers and an assistant in the classroom, plus the classroom was set up for mass computer usage. She and Catherine generally used Study Island on Fridays as the culminating activity for the week's lesson unit.

Sarah noted that the sixth grade male students liked working in a room set up for computer usage. She said, "The ability to play Study Island games made it a successful instructional tool." In addition, the second period male students appeared to be invested in enhancing their reading skills. Sarah believed that grouping the boys by ability level also made a difference in their behavior and attitude because no one person stood out. The students knew that everyone in the class was a struggling reader and the class was a safe environment for them to practice their reading skills. As shown previously, many of Sarah's students in the combined class with Catherine showed reading comprehension and fluency progress over the course of the research period.

Sarah's Fourth Period Class

Sarah's fourth period resource class was very different from her second period resource class due to the student make up and the logistics of the room. First, the fourth period resource class was located on the sixth grade hall and comprised five students (three boys and two girls). The fourth period class was held in a very small classroom. The room contained two desktops, and if Sarah wanted additional computers she would have had to check out a wireless laptop cart that contained 20 laptops from another middle school's media center. However, the wireless cart

was old and had been removed from service, so using it was not an option. In addition, the two desktop computers were also old and also had been heavily used. One of the desktops was so old that it did not recognize Study Island game mode.

Sarah said the emotional maturity level of the class was higher than that of her second period students. However, their attitude was totally different. She stated,

My fourth period students were not enthusiastic about using Study Island so they didn't buy into the games as well as my second period students. The program didn't capture their interest even though their reading level was higher. I think this is because of their higher maturity level and their belief that they are too *cool* for it. Although my fourth period students were generally well behaved their attitude indicated that they did not take their lessons seriously. They didn't buy into their lessons in general and Study Island in particular.

Sarah stated that she liked Study Island because the program captured students' interest levels, and she was able to use the reporting data to determine if her students were progressing in their comprehension and fluency skills. She stated, "The convenience of the program is awesome." Sarah gave her fourth period students the individual spreadsheet grid that Catherine developed so that they could track their Study Island module progress.

In order to overcome technical challenges, Sarah printed out and used the Study Island questions in a hard copy format to support her students IEP objectives and re-taught lessons when necessary so that she could have some data. She stated, "Continuous practice is the key to improvement and Study Island is a good alternative to traditional instruction." However, the computer technical challenges that she experienced during fourth period impacted her ability to use Study Island as much as she would have liked. It was also difficult to find an open spot on

school's computer labs schedule. Sarah stated if she did not experience technical problems she would have used Study Island approximately twice per week.

Sarah was only able to use Study Island a few times during the research period and only once with a new male student due to log in issues. Therefore, there were no Study Island report data for this group of male students. It was disappointing to Sarah that she could not fully implement the use of Study Island with her fourth period students due to the computer access difficulties. Despite the challenges, Sarah said,

I would absolutely use Study Island again because it worked out well for my second period students. The program helped them progress in their fluency and comprehension skills and many of them will be placed in team taught reading classes in the next school year.

My Story

Because I was asked by Noni to introduce Study Island to her seventh grade resource students, I had a unique opportunity to become a part of this research study and compare her students' behavior and results to my own seventh grade team-taught reading students. Noni and I were the only seventh grade special education reading teachers for the 2011-2012 school year, so we were able to share our observations and data regarding student performance throughout the school year. In addition, because I taught social studies to five of her six students (including the three challenging ones), I was well aware of their personalities and behavior. Both of our timeframes were in sync because I introduced Study Island to my team-taught students at the same time Noni's students received their first lesson.

My Students

Interestingly, even though I used the Study Island modules with the 19 general and special education students in my class (nine boys and 10 girls), I had the same kinds of negative behaviors manifest in my team-taught class. My team-taught class occurred during eighth period, which was the last time segment of the day. Therefore, most of the students were ready to go home and many times were not receptive to receiving instruction. I had eight students on my special education roster, and my team-teaching partner had the remaining students on her general education roll. In addition, two male class members did not receive services from my school system's special education program, even though they were diagnosed as having Attention Deficit Hyperactivity Disorder (ADHD). Their general education teachers were aware of their diagnosis and provided them support when needed.

Additionally, one particular male student on my roster, diagnosed with a learning disability, exhibited behavior that increasingly became more challenging to manage over the course of the school year. He needed constant one-on-one attention from an adult in order to complete any task that had been assigned to him. He was easily distracted, blurted out random comments, impulsively touched items on the wall and on other people's desks, talked to other students instead of listening to the lesson, constantly asked to leave the room for water and bathroom breaks (which was allowed as part of his IEP accommodations), and attempted to challenge authority. During the year in order to accommodate his needs, I would take him to a private area where my special education department had a small trampoline and let him jump on it, I would take him outside and let him run around, and I would take him on walks around the building.

My Study Island Environment

My team teaching partner reserved time in our school's computer labs every Tuesday and Thursday during the research period. Most of the Study Island sessions occurred in the seventh grade computer lab, but occasionally we would go off our hallway and have class in the sixth grade computer lab. The computer labs had approximately 40 desktops available for use. At the beginning of class I would write the assignment on the whiteboard and provide instructions, hand out the students' spreadsheets so they would know where they should begin, and my team teacher and I would answer questions or handle log in issues.

Based on my own observations I found that once most of my students settled down and focused on their Study Island content, they were able to complete their assigned modules. However, the students with behavior problems due to ADHD and distractibility found it difficult to complete their Study Island modules. Interestingly, the male student who scored the lowest was diagnosed with ADHD and was on the general education roster. This can be seen in Table 8. The challenging male student on my roster was only able to complete his Study Island pre-test and Context Clues modules. He received the second lowest score. During our class sessions I would stand next to him to prompt him to get started and continue the assignment. However, as soon as I moved away to help another student he would become distracted and begin to twirl in his chair, look around the room, and so on. One day I asked him if he had computer access at home and when he said yes I told him I wanted him to finish the assigned module at home. Nodding his head around in the air he replied in a sing-song fashion, "I'm not going to do it." It was not said in a disrespectful manner, just in a matter-of-fact, playful tone. When I checked the next day I noted that he had not completed the module. I emailed his mother after school and let

her know that he had the assignment due, but he still did not complete it. I then gave him an alternative assignment in order to make sure that he understood the reading skill.

Table 8

Seventh Grade Team-Taught Reading Students' Overall Results

Male Student	Special or General Education Roster	Percent Correct
1	Special Education	52.2%
2	Special Education	69.5%
3	General Education	76.9%
4	Special Education	45.9%
5	General Education (ADHD student)	53.0%
6	General Education (ADHD student)	38.2%
7	Special Education	62.0%
8	General Education	61.5%
9	Special Education	51.9%

My experiences were similar to those Noni had in her resource class. Both Noni and I found that using headsets in our classes did not help the students focus as much as we would have liked. I did have some success with my team-taught students. For example, I would tell them at the start of the Study Island session, “OK students, I want to oooh and ahhh over your scores. Impress me!” When a student achieved a passing score he or she would call me over and say, “Ms. Grimes, I want you to oooh and ahhh” so I would do so. We would both laugh and it was a light-hearted moment for us. They knew that they had pleased me and that made them happy. The male students particularly liked for me to come over and give them praise. I would give them high fives when they successfully passed a module. In addition, I would write remarks such as “good job” on it and draw a smiley faces on their spreadsheet to show that I was especially pleased with a particular score.

Summary

As stated at this beginning of this chapter, this qualitative research study investigated the experiences of three middle school special education reading teachers when they taught lessons using Study Island technology with their male students in a resource reading class. This chapter focused on the experiences the teachers based on the research questions:

1. What types of experiences do middle school special education reading teachers have when they teach lessons using Study Island?
2. Does using the interactive features of websites such as Study Island increase middle school boys' reading fluency and comprehension?
3. To what extent does playing video games on educational websites such as Study Island engage or fail to engage middle school boys' interest in reading fiction and non-fiction content?

In my role as the researcher, I used my lens to capture the varied experiences the three reading teachers had when using Study Island in their resource classes. In addition, I was brought into this research study when I was asked to introduce Study Island to my seventh grade teacher's students. After my interviews were completed, I sorted and organized the data collected from my notes and then coded the information to determine the themes that emerged for my research questions. These themes helped me to tell my teachers' stories as accurately as possible so that their voice could be heard. Further analysis of those themes appears in the discussion of findings in the next chapter which details the conclusions and implications that might lend themselves to future research. I also identify the results of this study and discuss how the experiences of the special education teachers might benefit educators as a whole.

CHAPTER 5

FINDINGS, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

We currently live in a world that receives a large amount of information via a digital (e.g., iPods, cell phones) or online format. Today's students have never known a time when information and entertainment was not received via a digital or web-based platform. The delivery of education to students in the 21st century should not be any different. Since the birth of the curriculum, field scholars have noted the changes through which the delivery of education has gone. According to Pinar, Reynolds, Slattery, and Taubman (2004), "new knowledge requires constant curriculum revision" (p. 71). Effective teachers know that they need to provide instruction in the way that best meets their students' learning acquisition style. Twenty-first century students are very familiar with playing digital games; therefore, providing education in this manner is a natural progression.

The purpose of this study was to understand special education reading teachers' experiences in their resource classrooms and to discern if using an online education program like Study Island would engage male students' interest and in turn help them increase their reading fluency and comprehension skills. This was an opportune time to conduct such a research study because more and more school districts are purchasing licenses for products such as Study Island for their students' use. Although the results from this study were limited due to the small

number of participants, it might help shed light on the experiences all teachers face when using online technology in the classroom.

Findings

Based on the stories presented, the teacher participants all appreciated the way Study Island operated when the training program was presented during pre-planning week at the start of the 2011-2012 school year. Teachers looked forward to implementing its usage as a means to help students increase their fluency and comprehension skills, which in turn could help them meet expectation on the state of Georgia's CRCT. However, the teachers met with different levels of success due to the behavior of some students and technological challenges. All teacher participants indicated they would like to use Study Island again in the future and stated it would be more effective to start using it earlier in the school year. Teachers' individual experiences should help to collectively know the best way to proceed when reading teachers meet for vertical team lesson planning sessions at the start of the next academic year.

The three reading teachers and I had a variety of experiences when we taught lessons using Study Island in the resource and team taught classrooms. Because resource students are generally more than two years behind grade level in regards to their reading ability, the teachers hoped that Study Island would be a positive way to generate buy-in and motivation and help increase students' reading ability. Also, because there are generally more boys than girls in resource classrooms, this particular setting was deemed to be a good microcosm to see how male students in a larger setting would perceive and benefit from an online education program.

The three reading teachers and I found that Study Island had both strengths and weaknesses. All found that the program was easy to use from both a teacher and student perspective. After training, the teachers were able to set up classes and assign students to the

reading skills modules using a logical workflow process. In addition, the Study Island website provided tutorials to help teachers understand how to navigate the system. When difficulties were encountered, we were able to call the customer service number and receive live assistance. Students were able to create avatars and play the games with minimal assistance. However, all the teachers stated that they would like an option for Study Island to use the students' *last* score to determine their passing rate instead of a cumulative score. Students expressed frustration when they reached the goal that had been set for them (i.e., 80%), but Study Island still showed a red *Incomplete* score because the percentage was factored into the total number of attempts. The students looked forward to seeing the green *Completed* score.

When I coded my teachers' interviews, the overwhelming themes that emerged were the impact of student behavior and the role that the technology comfort level of the teacher played in the successful implementation of Study Island in the resource and team-taught classroom. Though the themes emerged individually, as the data analysis continued it became clear that these findings were intricately interrelated as communicated through the text that follows.

When I began the preparations for this research study, I never considered the effect of inappropriate student behavior, and yet, I found that appropriate student behavior was a lynchpin for a successful online education program implementation. Prior to beginning this research study I felt that because most of the students at my middle school had computers at home, and because they were always regaling me with their digital game triumphs, they would be eager to use an online education program. My viewpoint was supported by a study by Bain and Rice (2006), who found that all of their sixth grade participants had a favorable view of technology.

However, Noni, the seventh grade resource reading teacher, and I both found that inappropriate behavior negatively affected the benefits of Study Island because the students were

so busy talking, tapping their fingers on their desk or table, engaged in horseplay and so on that they did not get far in completing their reading skills modules. Noni's dominant impression was that her students only wanted to play the Study Island games and their interest in answering the questions was secondary. Her students' low scores confirmed her opinion. She was only able to get her students to complete their pretest and Main Idea modules and none of them were able to achieve a 50% score. Her students' highest pretest score was 49.5% and the highest Main Idea score was 28.6%. When I used Study Island with my team-taught seventh grade reading students, I used game mode as a privilege. If my students were not progressing or were not actively working on the assignment, I took away their game mode privilege and told them they had to work in test mode until I saw progress. They then became motivated to earn the right to play the games back.

Conversely, Catherine and Sarah had success when they used Study Island with their sixth and eighth grade reading students. They had the perfect blend of well-behaved, motivated students and the technology comfort level to support their endeavors. Therefore, a key finding was that the effectiveness of using the interactive features of websites such as Study Island to increase middle school male students' reading fluency and comprehension is individualized based on the appropriate or inappropriate behavior of the student. A strong reading teacher can provide instruction, but if students behave in an inappropriate manner then the effectiveness of the online program is negated.

Another key finding was that playing video games on educational websites such as Study Island did engage the middle school male students' interest in reading fiction and non-fiction content. According to Hofstede, game playing provides users with satisfaction in the areas of safety, love and belonging, esteem, and self-realization (as cited in Khine & Saleh, 2008-2009).

Hofstede further stated that, “Gameplay is immersive, requires the player to make frequent and important decisions, have clear goals and players adapt to each other individually that creates a social network” (as cited in Khine & Saleh, 2008-2009, p. 433). Beck and Wade (2006) further noted that playing video games allows users to fulfill a fantasy (e.g., driving a race car).

Although the male students in Noni’s class were less inclined to read the reading skills passages and answer the corresponding questions, they did so in order to play the games.

Based on their observations and statistics from Study Island reports, Catherine and Sarah’s students did show progress in their reading ability. The posttest results showed that seven out of 12 students achieved scores of 70% or higher and two received 90%. Furthermore, due to the scores that Catherine noted on the students’ Study Island spreadsheets, the students were also able to visually see their reading progress and *know* that their skills were increasing. This was an important factor in the success of the program’s implementation in their classroom. Catherine and Sarah’s use of the spreadsheet was an important strategy to motivate their students and keep them on track. The male students in Catherine and Sarah’s sixth and eighth grade classes viewed the games as a reward for answering questions.

In addition, the degree to which the teacher participants felt comfortable using technology was another key finding. Catherine, Sarah, and I all felt very comfortable using Study Island in the classroom and had no problem navigating around the program. Noni, on the other hand, did not like using technology at the start of this research study. It was gratifying to see her become comfortable using the online education program, become more open to technology use, and grow to the point of wanting to use Study Island again in the future. At the end of this research study, she was proficient in using Study Island and successful at incorporating it in her lessons.

Another key finding was the importance of having enough computers in the classroom so that all students could work on Study Island. Catherine and Sarah's combined class was located in a room set up for computer usage so they were able to rotate the number of students who worked on their modules and maximized their time. Noni also worked in a classroom set up as a computer center. However, Sarah's fourth period class was held in a room that was very small and limited to two computers. Therefore, she was unable to implement Study Island effectively for those students.

Conclusions

This qualitative research study sought to determine the kinds of experiences that middle school special education reading teachers had when using an online education program in a resource classroom. It also sought to determine if an online education program such as Study Island would motivate male students to read more fiction and non-fiction reading material. Many male students in western countries are underachieving academically and incorporating the use of games in their educational content is one way to motivate them to learn. It is my opinion that when students are focused and motivated then reading progress is achieved. Conversely, when students engage in inappropriate behavior very little is accomplished even though an online education program with a games component is utilized.

Observing and interviewing the three teacher participants was very enlightening to me and their methods will enhance my own teaching practice. Each teacher provided instruction using her own unique style and her students, in turn, responded when directed to do so. Each teacher had strong classroom management skills which she leveraged in order to implement Study Island in her classrooms. They all viewed the use of Study Island as a positive addition to their lessons and all stated they would definitely use the program in the future.

Implications for Practice

This research study can provide teachers with strategies on how to successfully implement an online education program in a school's academic programs. Catherine and Sarah were able to motivate their students to be focused and care about the scores they achieved through the use of praise and incentives. However, teachers also need to be mindful that negative behavior can stymie academic progress (which both Noni and I experienced). Teachers will need to know what motivates their students and then tap into their desires to create buy-in. This is individual insight and each teacher will need to learn what works best for him or her.

Implications for Future Research

It would be interesting to know how many of the sixth grade male students in Catherine and Sarah's second period class met expectation on the state of Georgia's CRCT and how many were able to read close to grade level at the end of the 2011-2012 school year since they were the only ones to take full advantage of Study Island reading skills modules. Future researchers might also be interested in following a group of reading teachers who are able to teach all 19 Study Island modules over the course of an entire school year in both the general education and resource settings. Again, I would surmise that each teacher's experience would be unique but the overall information would yield ways to standardize the implementation of an online education program in a school.

Additional research can also be undertaken to identify behavior management strategies that special education teachers can use to engage students. It is vital that students are focused on curriculum content so that meaningful learning occurs. Schools are placing lower ability students in team-taught classrooms so that they receive services in the least restrictive environment and special education teachers have to support them academically and socially.

Further research in this area can provide guidance to teachers regarding ways that negative behaviors are phased out and positive actions are reinforced.

Future researchers can also study the impact that technology familiarization and comfort level has on the utilization of hardware and software tools in the classroom. As more school districts purchase interactive programs to augment traditional methods of instruction, teachers need to become technically savvy in order to operate equipment, navigate online content, and deliver formatted lessons to students. Further research could delve into the connections between teachers' willingness to use technology and the determination of what works and what does not. These studies could help identify best practices and be a valuable resource for both teachers and administrators.

It would be also be interesting to conduct this study with a larger population of students and teachers and to add the female population to the student pool. Many girls today play video games, and it would be thought-provoking to see if an online education program would help increase their reading skills. In addition, as the use of iPads and notebooks increase, curious researchers might conduct studies to see if students would be more motivated to use online education programs on these platforms. Also, future researchers could conduct a similar study on comparably designed software to see if the results are similar. Lastly, future researchers could conduct this study using a quantitative approach method to understand the effectiveness of an online education program from a statistical perspective.

Summary

Although the results from this qualitative research study are limited due to the small number of teacher participants, it is important for all teachers to be aware of the impact that positive and negative student behavior has on the successful implementation of an online

education program such as Study Island. One unexpected, yet optimistic, finding of this study was the positive outcome that resulted from the perfect combination of skilled teacher and motivated students. The use of online education programs with a game component is a valuable tool in a teacher's lesson arsenal, and educators need to be open to the idea of using these tools in their classrooms.

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APPENDIX A: PERMISSION TO USE STUDY ISLAND

From:	Laura Briceno [Laura.Briceno@studyisland.com]	Sent: Tue 5/31/2011 4:06 PM
To:	Elizabeth Nemrava; Grimes, Roddran	
Cc:	Jana Oliver	
Subject:	RE: PhD Dissertation Research Study Using Study Island	

Hi Ms. Grimes,

Thank you for contacting us regarding your PhD dissertation on the use of Study Island with boys and its effect on Reading instruction. We're happy to help out in any way we can. There are a number of resources available to you that may help you learn more about the Study Island program – all the ins and outs, implementation ideas, etc.

1. You can attend any of our free training webinars, which are posted here:
<http://teacherweb.com/MH/StudyIsland/Webinar/wscal3.aspx>
2. Within the Study Island program, click “Help” for a full teachers manual (look for the “HOW TO: The Manual & MORE!” link. To access this, you'll need to use your Study Islandusername and password and log into the program.
3. Other resources in the Help section that might be useful are the Video Tutorials, the Implementation section, and Motivation link.
4. Lastly, you may feel free to contact Jana Oliver if you have any general usage or implementation questions: jana.oliver@studyisland.com or 800-419-3191 x7458

I'm a former Georgia teacher as well, and would be more than happy to consult with you as well if you have any questions whatsoever. Thanks so much!

Best,

Laura Briceno | South Regional Sales Director | Archipelago Learning, LLC
 3232 McKinney Ave Suite 400, Dallas, TX 75204
phone 800.419.3191 x7614 **cell** 678.525.3762 **fax** 877.519.9555
email laura.briceno@studyisland.com

APPENDIX B: PERMISSION TO USE STUDY ISLAND SCREEN SHOTS AND NAME

From: Laura Briceno [mailto:Laura.Briceno@archlearning.com]

Sent: Thu 10/27/2011 1:24 PM

To: Grimes, Roddran

Subject: RE: PhD Dissertation Research Study Using Study Island

Hi Roddran,

Yes, you may use the screen shots and the name, Study Island. It is technically a trademark, but I don't think you need to include the symbol. Thanks and good luck with the proposal!

Laura
Laura Briceno
800.419.3191 x7614
laura.briceno@archlearning.com

APPENDIX C: STUDY ISLAND HOME PAGE IMAGE

Call Us: 1 (800) 419-3191 My Location: None 0 item(s) in cart Search

Products & Pricing Results Training & Support

Study Island

Rigorous content built from your state's standards

Member Log In

Forgot Password?

Response to Intervention (RTI) >

Study Island meets your school's RTI needs with valuable reporting and diagnostic tools for a fraction of the cost of other programs. [Learn more today](#) and see a sample RTI Report!

What's New on The Island? >

Study Island will be adding a boatload of new enhancements this fall designed to boost productivity, engage students, and support teachers and administrators. [Learn more today!](#)

Common Core (CCSS) Benchmarking >

The Study Island Common Core Benchmarking Program gives teachers a snapshot of student proficiencies in relation to the Common Core State Standards. At any time, teachers can assess student progress and pinpoint areas in which students are excelling or need extra practice.

APPENDIX D: STUDY ISLAND INDIVIDUAL STUDENT REPORT EXAMPLE IMAGE



Report Period: Aug 1, 05 through ...

Change Report Period

Individual Subject Report

Remove Checked Records

Program: Georgia CRCT Preparation
Subject: Reading
User: Example Student
Passing Level: Proficient
Starting Date: Mar 7, 2008
Report Period: Mar 7, 2008 through Aug 22, 2008


Compare with others

Suggested Topics

Automatically Email Report

Topic	Sessions	Time Spent	Correct/Total	% Correct	Grade
<input type="checkbox"/> 1. Pretest - Reading	150	11:18:17	708 / 1152	61.5%	-
2. Word Analysis, Fluency, and Systematic Vocabulary Development					
<input type="checkbox"/> a. Analogies - Standard	258	9:30:27	1078 / 1513	71.2%	P
<input type="checkbox"/> b. Word Origins - Standard	2	4:13	10 / 13	76.9%	P
<input type="checkbox"/> c. Foreign Words	139	7:51:20	480 / 750	64.0%	B
<input type="checkbox"/> d. Foreign Words	5	8:37	30 / 44	68.2%	P
<input type="checkbox"/> e. Foreign Words	6	14:27	28 / 39	71.8%	P
<input type="checkbox"/> f. Context Clues - Standard	81	4:55:31	381 / 544	70.0%	P
<input type="checkbox"/> g. Context Clues	2	7:33	17 / 20	85.0%	A
3. Reading Comprehension					
<input type="checkbox"/> a. Consumer Materials - Standard	35	2:02:58	103 / 154	66.9%	B
<input type="checkbox"/> b. Locate Information	10	26:43	36 / 52	69.2%	P
<input type="checkbox"/> c. Functional Text	2	5:28	11 / 14	78.6%	P
<input type="checkbox"/> d. Proposition and Support Patterns - Standard	9	22:53	14 / 34	41.2%	BB
<input type="checkbox"/> e. Support Proposition	48	2:19:35	88 / 169	52.1%	B
<input type="checkbox"/> f. Compare/Contrast Texts - Standard	21	1:33:56	59 / 110	53.6%	B
<input type="checkbox"/> g. Compare and Contrast Organization	23	40:51	66 / 97	68.0%	P
<input type="checkbox"/> h. Compare/Contrast Texts	1	4:47	10 / 10	100.0%	A
<input type="checkbox"/> i. Summarization - Standard	49	3:36:47	108 / 175	61.7%	B

APPENDIX E: STUDY ISLAND COMPARISON REPORT EXAMPLE IMAGE



florcco_sue - Fri 08/22/2008

Report Period: Mar 7, 08 through -- -- --

[Change Report Period](#)

[Back](#)

Program: Georgia CRCT Preparation
Subject: Reading
State: GA
School: Example School
User: Example Student
Passing Level: Proficient
Starting Date: Mar 7, 2008
Report Period: Mar 7, 2008 through Aug 22, 2008

[Show Only Attempted Material](#)

Individual Subject Comparison Report

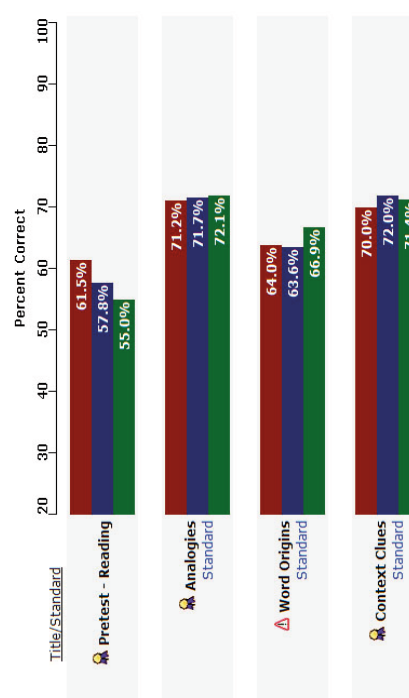
[Automatically Email Report](#)

Example Student vs. School vs. State

Example Student

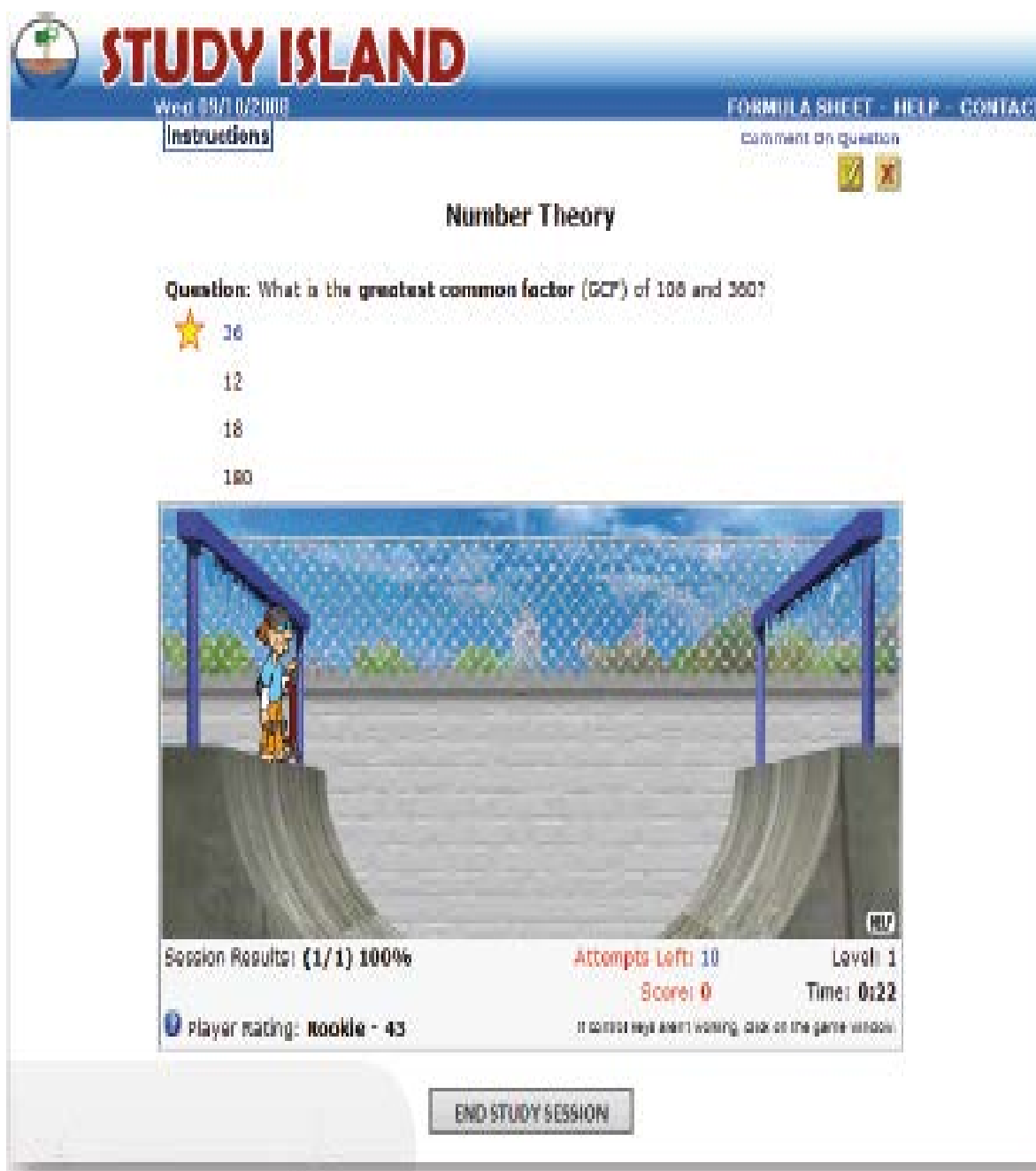
Georgia Level 8 (this year)

All GA users Level 8



Title/Standard	Example Student	Georgia Level 8 (this year)	All GA users Level 8
Pretest - Reading	61.5%	57.8%	55.0%
Analogies Standard	71.2%	71.7%	72.1%
Word Origins Standard	64.0%	63.6%	66.9%
Context Clues Standard	70.0%	72.0%	71.4%

APPENDIX F: STUDY ISLAND VIDEO GAME EXAMPLE IMAGE



STUDY ISLAND

Wed 08/17/2008

FORMULA SHEET - HELP - CONTACT

[Instructions](#)

[comment on question](#)

Number Theory


Question: What is the **greatest common factor (GCF)** of 108 and 360?

★ 26

12

18

180



Session Results: (1/1) 100%

Attempts Left: 10

Level: 1

Score: 0

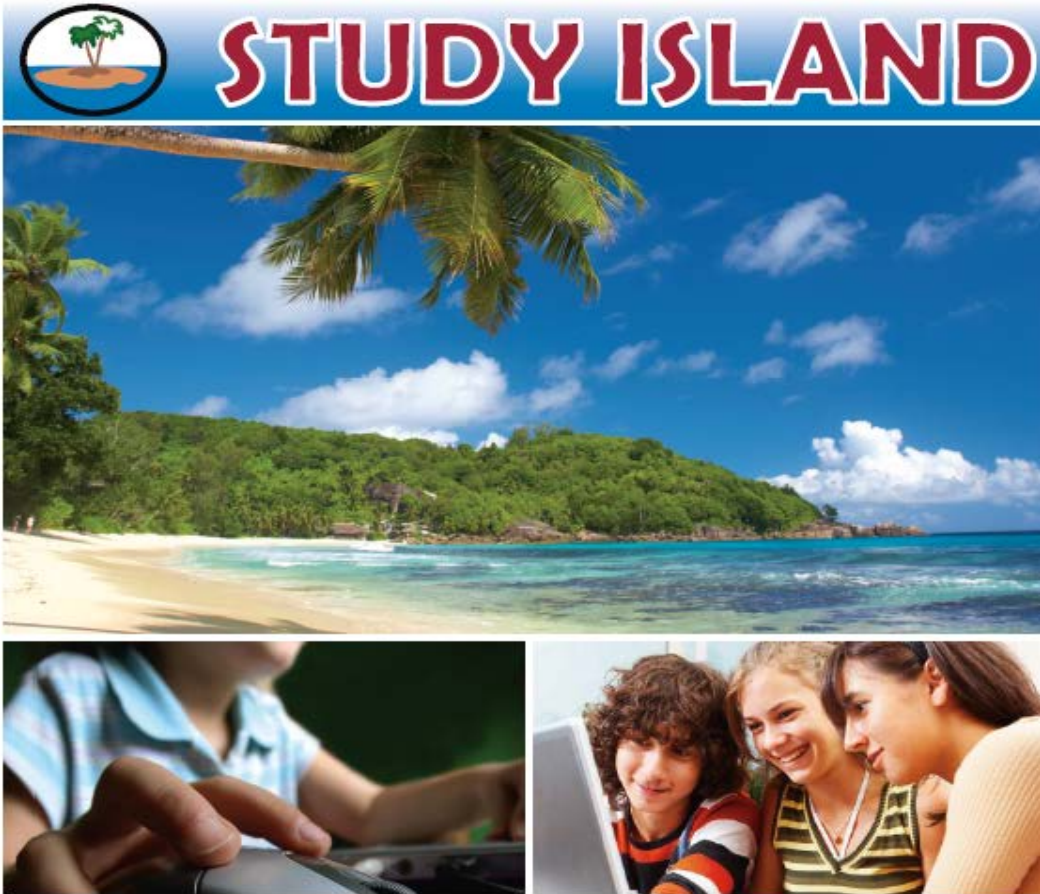
Time: 0:22

Player Rating: **Rookie** - 43

If control keys aren't working, click on the game window.

END STUDY SESSION

APPENDIX G: STUDY ISLAND CRCT BROCHURE IMAGE



**Online CRCT
Preparation Program**

800.419.3191

| www.studyisland.com/GA

| info@studyisland.com

Online CRCT Preparation Program

The Study Island CRCT Preparation Program is specifically designed to help students master the content specified in the Georgia Performance Standards. Study Island's focus on the Georgia Performance Standards enables students to improve their performance in all skill areas tested on the CRCT in grades 2 through 8. Study Island also offers Fine Arts and Technology products for elementary and middle school. In addition, Kindergarten through 1st grade products are available for Math and Reading Skills.

The user-friendly interface allows students to move through the program step-by-step. Each section has a pre-test and a post-test, as well as topics that cover each of the Georgia Performance Standards. Topics consist of questions, answers, explanations, and lessons that address the specific skills required in order to master the Georgia Performance Standards.



Web-Based

Study Island requires no software installation and is simultaneously accessible to all students. Students can use it at school, home, or anywhere with an Internet connection.



Dynamic Content

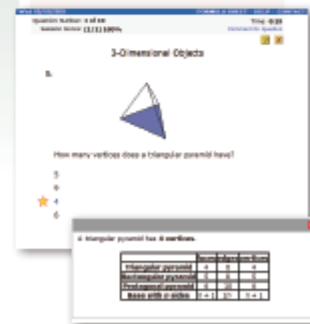
Not only are there thousands of practice items, but each item is constantly changing. The answers to the multiple choice questions continuously alternate position, and the numbers for the math questions are randomly chosen. This compels students to learn the concepts rather than just memorize the answers.

Instant Feedback and Built-In Remediation

Upon answering a question incorrectly, students are shown the correct answer along with a detailed explanation for the correct response. When students need extra help on a specific topic, the Study Island program automatically prompts them to work on remedial-level material for that topic.

Research-Based

Study Island is foundationally and statistically research based. The program has proven effective in increasing student learning and achievement.



Online CRCT Preparation Program

Self-Paced or Teacher-Guided

Study Island allows students to learn at their own pace. The amount of time a student spends on a skill depends on that student's performance. The custom teacher page gives teachers the option of guiding students through the program by communicating their expectations to students and creating class assignments.



Real-Time Reporting and RTI

The Study Island program records statistics for each user session in a real-time report card. These statistics measure progress, streamline the learning process, and can be customized by student, subject, class, grade, and school. Teachers and administrators can have access to a private page where they are able to view student, class, grade-level, or school-wide usage statistics and results. Real-time reports, including graphs, help teachers to measure progress and identify areas of student weaknesses and deficiencies as they relate to the Georgia Performance Standards. With this knowledge, teachers can promptly respond with appropriate intervention and remediation.



STUDY ISLAND
Report Period: Aug 27, 2011 - Sep 1, 2011

Individual Subject Report

Region: Georgia CRCT Preparation
Subject: Reading
Grade: 4th
School: Columbus Middle
Reporting Period: Aug 27, 2011 - Sep 1, 2011
Report Period: Aug 27, 2011 through Sep 1, 2011

Standard	Student	School	State	Score	Grade
4-1-1-1	85%	75%	70%	85%	A
4-1-1-2	75%	65%	60%	75%	B
4-1-1-3	65%	55%	50%	65%	C
4-1-1-4	55%	45%	40%	55%	D
4-1-1-5	45%	35%	30%	45%	F

Standard Test Mode or Fun, Interactive Games

Study Island enables students to choose their style of learning. Students can work using a standard test format or several interactive games. As with many of Study Island's features, your school has the option to restrict access to the games. Printable worksheets are also available.





STUDY ISLAND

Included with your subscription:

Unlimited school and home usage for students and teachers. We encourage you to use Study Island as much as possible from anywhere you can access the Internet.

Unlimited free tech support via toll-free phone, live chat, and email. We rank in the top 1% for quality customer service in our industry!

Implementation consultations. Implementation specialists are on staff to provide an introduction of the Study Island program for up to three staff members via conference call. Specialized usage guidance is also available year-round!

Study Island Statistics

- 98% of teachers feel that Study Island is helping their students.
- 91% of teachers and 89% of students say that the students can use Study Island without any additional help.
- 95% of teachers say their students enjoy using Study Island.

Statistics gathered from a recent Study Island survey.

Parent-School Connection

Educators know that the more a parent is involved in their child's education, the more successful a child's educational career will be. Study Island creates a positive entry point for parental access to student activities and progress measurement. Since Study Island is Web-based, students can log in from home and work through exercises or homework assignments. In addition, parents can automatically receive email reports on their student's progress directly from the Study Island program.

"Study Island is a great resource to use to further the concepts and skills that are being taught in the classroom."

— *Technology Assistant*

"Study Island is a wonderful program that meets the individual needs of all students in various subjects. Teachers can develop group lessons or implement a plan for the specific strengths and needs of individual students."

— *Principal*

"Students enjoy using the computer to learn. Study Island is self-paced and provides support if a student is struggling. Reports give teachers the ability to quickly identify areas needing improvement."

— *Teacher*



800.419.3191

| www.studyisland.com/GA

| info@studyisland.com

APPENDIX H: CORPORATE INFORMATION

The following corporate educational products were cited in this research study.

Additional information regarding the products can be found by clicking on the links.

Classroom Performance System

<http://www.einstruction.com/products/assessment/cps/index.html>

Scholastic's Read 180 program

<http://read180.scholastic.com/reading-intervention-program>

SOLO

http://www.donjohnston.com/support/solo6_sup/index.html

Study Island

<http://www.studyisland.com/>

Edmark

<http://www.donjohnston.com/products/edmark/index.html>

SRA Corrective Reading Program

<http://www.mcgraw-hill.co.uk/sra/correctivereading.htm>

Scholastic's Read XL

<http://teacher.scholastic.com/products/readxl/level2.htm>

Apangea Learning

<http://www.apangealearning.com/>

Orchard Learning

<http://www.orchardlng.com/>

Skills Tutor

<http://skillstutor.com/hmh/site/skillstutor/>