

5-2017

The Use of E-Readers for Secondary Literacy and Reading Motivation

Graham Parker
University of South Carolina

Follow this and additional works at: <https://scholarcommons.sc.edu/etd>



Part of the [Curriculum and Instruction Commons](#)

Recommended Citation

Parker, G.(2017). *The Use of E-Readers for Secondary Literacy and Reading Motivation*. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/4027>

This Open Access Dissertation is brought to you by Scholar Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

THE USE OF E-READERS FOR SECONDARY LITERACY AND READING MOTIVATION

by

Graham Parker

Bachelor of Arts
Clemson University, 2001

Master of Human Resource Development
Clemson University, 2004

Master of Liberal Studies
Fort Hays State University, 2009

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Curriculum and Instruction

College of Education

University of South Carolina

2017

Accepted by:

Susan Schramm-Pate, Major Professor

Kenneth Vogler, Committee Member

Richard Lussier, Committee Member

Victoria Oglan, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

© Copyright by Graham Parker, 2017
All Rights Reserved

DEDICATION

This dissertation is dedicated to those I love most: my daddy, who believed I could do anything – I carry you with me always; my mama, who showed me how to do everything through your incredible determination every single day – you are my hero; my girls, the reason for all I do – may you climb every mountain you choose; and my husband, who believes in me even when I cannot – you are my light.

ACKNOWLEDGEMENTS

I would like to thank Dr. Susan Schramm-Pate for her guidance during this process. I wish to thank my school district, building principal, and students for their support and participation. I must also thank my friends and colleagues, Dee Tindal and David Dennis, for walking this journey with me and without whom I would not have survived this process

ABSTRACT

The Use of E-Readers for Secondary Literacy and Reading Motivation is an Action Research study that describes one predominantly white, southern, rural working-class English Language Arts class of 11th grade student-participants ($n=44$) of below average reading ability who experienced reading *The Great Gatsby* on e-readers (i.e., electronic books with dictionaries and visual texts in the form of illustrations to supplement written text). The students' motivation to read was compared and contrasted with an 11th grade class of student-participants who read *The Great Gatsby* via a traditional print book (i.e., written text with no visual text). Quantitative data included a pre and post-test survey designed to compare reading motivation levels and comprehension skills in reading and qualitative data included informal interviews with the student-participants to determine perceptions and feelings about the experiences. Quantitative data was analyzed with a simple t -test and qualitative data was analyzed using the constant comparative method of analysis. Reflections of the data with the student-participants are included.

Based on the results of the action research study, students who read *The Great Gatsby* using e-readers had, on average, slightly higher reading comprehension scores and showed increases in their reading motivation. According to the data analysis, e-readers benefited 11th grade students of average or below average reading levels at West High School by boosting reading comprehension as well as increasing students' motivation to complete the reading of their required texts.

TABLE OF CONTENTS

DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER ONE: INTRODUCTION	1
Introduction	1
English Language and Literacy Today	1
E-Readers	2
Problem of Practice Problem Statement	2
Research Question	3
Purpose Statement	3
Basis in Scholarly Literature	3
Participants	5
Research Site	6
Data Sources	6
Data Collection Methods	7
Glossary of Key Words/Terms	7

Potential Weaknesses.....	8
Significance of the Study	9
Conclusion	10
CHAPTER TWO: RELATED RESEARCH & LITERATURE REVIEW	11
Introduction.....	11
Importance of a Literature Review	13
Theoretical Framework.....	14
Historical Context.....	19
Conclusion	24
CHAPTER THREE: METHODOLOGY	26
Introduction.....	26
Problem Statement.....	26
Research Question	27
Purpose Statement.....	27
Action Research Design.....	28
Researcher.....	28
Sample	29
Setting	31
Instrumentation and Materials	31
Data Collection	33
Data Analysis & Reflection	34
Conclusion	34
CHAPTER FOUR: FINDINGS & IMPLICATIONS.....	35

Introduction.....	35
Data Collection Strategy	36
Ongoing Analysis & Reflection.....	37
Reflective Stance	38
Data Analysis	38
Data Interpretation	39
Answering the Research Question.....	41
Conclusion	44
CHAPTER FIVE: SUMMARY, CONCLUSIONS, & ACTION PLAN	45
Introduction.....	45
Overview of the Study	45
Research Question	46
Key Questions.....	46
Action Researcher.....	47
Developing an Action Plan	48
Action Plan	51
Facilitating Educational Change	53
Summary of Research Findings	54
Implications of the Findings	54
Limitations	56
Suggestions for Future Research	57
Conclusion	58
References.....	60

APPENDIX A: PARENTAL CONSENT FORM	64
APPENDIX B: STUDENT PARTICIPANT ASSENT FORM	65
APPENDIX C: PERMISSION TO COMPLETE RESEARCH AT SCHOOL LEVEL ..	66
APPENDIX D: PERMISSION TO COMPLETE RESEARCH AT DISTRICT LEVEL	68
APPENDIX E: ADOLESCENT MOTIVATIONS FOR SCHOOL READING (AMSR) QUESTIONNAIRE	70
APPENDIX F: READING COMPREHENSION TEST—THE GREAT GATSBY	74
APPENDIX G: MOTIVATION SURVEY RESPONSES FOR PRINT GROUP	79
APPENDIX H: MOTIVATION SURVEY RESPONSES FOR E-READER GROUP...	82
APPENDIX I: READING COMPREHENSION SCORES FOR PRINT GROUP	85
APPENDIX J: READING COMPREHENSION SCORES FOR E-READER GROUP.	86

LIST OF TABLES

Table 4.1 Comparison of Pre- and Post-Survey Responses of the Print Reader Group Using Traditional Print book	40
Table 4.2 ...Comparison of Pre- and Post-Survey Responses of the E-reader Group Using E-book.....	40

LIST OF FIGURES

Figure 4.1. Comparison of reading comprehension scores between classes.	41
--	----

LIST OF ABBREVIATIONS

AMSR	Adolescent Motivations for School Reading
ELA.....	English Language Arts
MAP Test	Measures of Academic Progress Test
PoP	Problem of Practice
WHS.....	West High School

CHAPTER ONE: INTRODUCTION

Introduction

The purpose of Chapter One of the dissertation is to introduce an action research study of two English Language Arts (ELA) classrooms of below-average reading ability in a predominantly white, rural southern high school. Forty-four student-participants comprising two groups read *The Great Gatsby* in different textual forms: one on e-readers and one with print books. These students often have difficulty with comprehension of written material. The researcher is an ELA teacher at West High School (WHS; pseudonym) and searched for a better method to help her students access textual material in order to attain an appropriate level of reading comprehension and to determine the students' feelings and perceptions about the different ways to access textual material in the contemporary classroom.

English Language and Literacy Today

According to Pardo (2004), English reading skills among United States public school children should be of most concern during the primary grades when students are beginning to be taught to recognize sight words and identify letter sounds. As a secondary ELA teacher at West High School, the teacher-researcher witnessed the lower-ability students struggling with reading comprehension and reading motivation. According to Pardo (2004), reading motivation is the second key factor in reading comprehension and performance on standardized summative assessments that are used to determine students' grades and rank in the high school setting. The researcher's aim was

to enable students to be motivated, hard-working readers who create meaning for themselves within the texts they are mandated to read by the State of South Carolina and to display increased comprehension on standardized tests. According to Young (2010), students benefit from e-readers in reading comprehension and motivation.

E-Readers

With continued and increasing use of technology in the K-12 setting, the idea of transitioning to e-books has come into debate. Many major publishing companies have begun offering digital versions of their texts, while some colleges and universities now charge students a mandatory course materials fee that includes the use of an e-book for courses (Young, 2010).

The use of electronic books at West High School exists sporadically, but is becoming increasingly popular in today's technological age. In the English Language Arts (ELA) department, there is consideration of transitioning to the use of such technology as opposed to traditional print.

Problem of Practice Problem Statement

The identified problem of practice for the present action research study involves two English Language Arts (ELA) classes, predominantly white, working class poor students who are identified as being of below average ability in the areas of reading comprehension and reading motivation. Electronic tablets (e-books) are available for these students to use at West High School (WHS), however, the e-books have not been studied to determine if they can address the problem of low reading comprehension scores of these 11th grade students with below average reading ability and/or low motivation to read. The participant-researcher teaches an American Literature course in

which *The Great Gatsby* is required reading on the standardized curriculum for 11th grade students mandated by the state of South Carolina. The teacher-researcher investigated the problem of the study to describe the ways in which two different groups of students accessed the text: one using e-books and one using print books. Through the present action research study, the teacher-researcher sought to determine to what extent reading comprehension and reading motivation levels in this high school can be affected using e-readers compared and contrasted with the students who read the text using traditional print books.

Research Question

The research question that guided this study was, “What is the impact of e-reader text of *The Great Gatsby* on the reading comprehension and reading motivation levels of 11th grade students who are identified as low-ability readers?”

Purpose Statement

The primary purpose of the present action research was to compare and contrast the reading comprehension and motivation levels of low-ability, rural, southern secondary ELA students at West High School who experienced reading *The Great Gatsby* in two different textual forms (i.e., e-books and traditional print books). The secondary purpose was to develop an action plan that will better serve these ELA students to raise their reading comprehension levels and reading motivation levels.

Basis in Scholarly Literature

Rationale for the Study/Theoretical Frameworks

In educational research, considerable attention has been devoted to theories of text comprehension and recall that stress the importance of pre-existing knowledge structures,

or schemata (Spiro, 1977). Schema Theory, developed by R.C. Anderson, is the theoretical basis for the aspect of research dealing with reading comprehension levels between students using e-readers and students reading traditional print novels. According to schema theory, a reader's prior knowledge, experiences, concepts, and vocabulary significantly influence reading comprehension (Little & Box, 2011). The lack of tools to recognize terms and understand concepts present the greatest obstacle to comprehension. This opens up a large potential for e-readers (with their electronic dictionaries and visual aids) to be beneficial for students.

“Albert Bandura wrote that individuals possess a self-system that enables them to exercise a measure of control over their thoughts, feelings, and actions” (Pajares, 1996, p. 543). This idea of self-efficacy from Bandura is the basis for the motivation aspect of research in this study. This view of motivation asserts that efficacy beliefs, involving both intrinsic and extrinsic motivation, play an integral role in the decision to perform activities, and the amount of effort exerted in the chosen activities (Bandura, 1997).

Action Research Philosophy

Mertler (2014) described action research as a process that can prove incredibly helpful in assisting teachers to find better ways of functioning in their classrooms and schools. This process may be seen as most helpful because “it focuses specifically on the unique characteristics of the population with whom a practice is employed or with whom some action must be taken” (Mertler, 2014, p. 3). By its very definition, action research is “any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process...” (Mertler, 2014, p. 4). It is research done by and for educators, specifically for investigating issues in education.

“The vast majority of educators are constantly looking for ways to improve their practice...it is the nature of their profession” (Mertler, 2014, p. 43). Problems are constantly arising in the field of education. Educators, regardless of their location, are all fighting very similar battles. By communicating the results of action research studies among various educational audiences, researchers conducting these studies save others from having to repeat the process to get the same results.

Participants

A group of 44 11th grade rural students of low reading ability and low levels of reading motivation participated in the present action research study. This study took place at West High School, a rural high school in upstate SC. The teacher-researcher separated the sample of participants into two groups. One group read the novel, *The Great Gatsby*, in traditional print form, while the other group read the same novel on an e-reader. Both groups took a teacher-designed post-test to compare reading comprehension levels. Both groups also took a pre- and post- survey, Adolescent Motivations for School Reading (AMSR), regarding reading motivation to determine if there is any significant difference between the two groups of readers and the methods through which the text was presented.

The sample consisted of 44 11th grade students who were chosen from two American Literature classes at West High School, a rural high school in upstate SC. The total possible population of 11th graders enrolled in grade-level ELA classes was 149. After gaining permission from administration and parents, the participating students attend the same teacher’s class, which is where the experiment took place. Twenty-one students identify as male and 23 identify as female. Racial demographic included 42 white students, one African American student, and one Latina.

Research Site

West High School is located in a rural part of the Upstate of South Carolina. The school's current enrollment is approximately 1,000 students. The school's demographic is consistent with that of the town of West Orchard (pseudonym) which is located in SC. There are approximately 2,400 people in West Orchard and the County of Keowee (pseudonym) has approximately 75,000 people (U.S. Census Bureau, 2013). Demographic data shows that the town of West Orchard's population is 83.1% white, 10.7% African American, and 6.2% Hispanic or Latino (U.S. Census Bureau, 2013). County demographic data indicates a population that is 87.4% white, 7.8% African American, and 4.8% Hispanic or Latino (U.S. Census Bureau, 2013).

The teacher-researcher conducted this study over approximately a 5-week period. Students attended their American Literature classes as normal and were assigned to read the classic novel, *The Great Gatsby*. Roughly half of the sample (one class of 24) read the novel using e-readers (specifically Nooks) and the remaining students (the other class of 20) read the novel in traditional print format.

Data Sources

The teacher-researcher collected data for the present action research study from several sources. The teacher-researcher obtained student Lexile scores and Measures of Academic Performance (MAP) Test scores from the school district's student database. Students completed a survey on motivations to read (Adolescent Motivations for School Reading [AMSR]) before and after reading the novel. Students also completed post-only teacher-designed reading comprehension tests to determine if a certain group scores a higher overall average. The teacher-researcher conducted face-to-face personal with

students to obtain a more in-depth understanding of what motivates these particular students to read and what plans they may have for the future.

Data Collection Methods

In the present action research study, the researcher employed a multi-question survey, Adolescent Motivations for School Reading (AMSR), on the levels of motivation for reading according to the 11th grade students who are participating in the study. The teacher-researcher administered the reading motivation survey before and after the reading of the novel (to both groups of students). The teacher-researcher calculated and analyzed variations in answers.

Participants also answered a multiple-choice question, teacher-designed reading comprehension test after reading the novel. Scores of students who read traditional print novels were compared to scores of students who read the novel via e-reader. The teacher-researcher calculated and analyzed variations in scores for any possible causal relationship between method of delivery of the text and reading comprehension. After obtaining permission and approval, the teacher-researcher collected data for the present action research study from the participants during their scheduled American Literature class time. No time outside of class was required for participants.

Glossary of Key Words/Terms

The researcher will define the following terms in order to further clarify and explain the purpose of this study:

E-reader. This term refers to electronic readers, such as Kindle (Amazon), Nook (Barnes & Noble), Sony reader, or Apple iPad. For the purposes of this study, the researcher employed the Nook e-reader.

Moderately challenging text. When the reading task is “slightly beyond ability, learners must increase their effort and use their knowledge and skills effectively to meet challenges” (Fulmer & Fritjers, 2011, p. 186). South Carolina’s State Standards call for an increase in challenging text read by students in grades K-12.

Motivation. Motivation consists of “beliefs, values, needs and goals that individuals have” (Guthrie & Wigfield, 1997, p. 5).

Reading comprehension. This describes “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (RAND Reading Study Group, 2002, p. 11).

Schema. A schema describes “an active organization of past reactions or experiences” (Spiro, 1977).

Self-efficacy. This refers to one’s belief in their own capabilities to perform on a certain level (Bandura, 1997).

Reading motivation. For the purposes of this study, reading motivation describes one’s desire to read and attempt to comprehend a text.

Traditional text/book. This refers to a paper text, a traditional book.

Potential Weaknesses

The researcher made all efforts to limit the threats to accuracy in this action research study, however, limitations need to be recognized. The results of this study can only be generalized to the student participants, or possibly students similar to participants at this specific high school. The lack of social and racial diversity in this sample makes it impossible to generalize these results to groups that do not very closely match those of West High School.

During the course of the study, three students who began the original research plan left the study for various reasons: one transferred schools, one dropped out, and one was expelled. While the likelihood of these three participants changing the data drastically is unlikely, it would have been helpful to get their perspectives, as they were all enrolled in the Print group, which used the traditional print books and had a greater variety of responses toward print books as compared to e-books.

The Adolescent Motivations for School Reading (AMSR) could be considered a limitation as the student participants reported those themselves. The teacher-researcher must assume that the given answers are truthful and accurate. However, based on the possibility of human error, the teacher-researcher considered that external sources could have influenced the student participants and their responses on any given day the survey was proctored.

Significance of the Study

The present action research study is significant in its potential to affect best practices for the teacher-researcher in moving forward. Teachers such as the current teacher-researcher may develop a better and more effective way to present required texts to students and increase their comprehension of said texts. A positive change in reading motivation for students would also be a significant change. For many students at WHS, the technology offered by e-readers is not readily available to them at home. The opportunity to use this technology can level the playing field for those students who do not have that availability on a regular basis in their homes.

Based on the results of the action research study, students who read *The Great Gatsby* using e-readers had slightly higher reading comprehension scores and showed

increases in their reading motivation. According to the data analysis, e-readers benefitted 11th grade students of average or below average reading levels at West High School in fall 2016. E-readers boosted reading comprehension scores as well as increase students' motivation to complete the reading of their required text, *The Great Gatsby*.

Conclusion

In Chapter One of this dissertation, the teacher-researcher details an overview of the present action research study regarding the use of electronic books and e-readers in high schools and their impact on students' reading comprehension and students' reading motivation. In Chapter Two, the teacher-researcher details the literature surrounding electronic reading sources whose popularity has grown at many educational levels. The teacher-researcher will share the problem of practice regarding the lack of literature in this area at the high school level, as well as the purpose of this study. Some scholars have focused on academic achievement, specifically reading comprehension, while others have only focused on student preference of traditional print versus electronic books.

In Chapter Three, the teacher-researcher will present the methodology and action research design of the present action research study. Chapter Four contains a summary of the results for the research question and a description regarding all research of this study. The researcher used the data presented in this chapter to determine to what extent the use of e-readers affected the reading comprehension levels and reading motivation levels in 11th grade students at WHS. In Chapter Five, the teacher-researcher provides a summary of results from the research and discusses this study in light of previous research. This chapter includes implications of the findings in relation to previous research, as well as recommendations for future research.

CHAPTER TWO: RELATED RESEARCH & LITERATURE REVIEW

Introduction

In Chapter Two of this Dissertation in Practice, the teacher-researcher details the literature surrounding electronic reading sources which have grown at many educational levels. The identified problem of practice for this DiP is the impact of electronic reading sources on high school students' reading comprehension and reading motivation ability in an English language arts (ELA) class. Begoray et al. (2013) claimed that "adolescents' worlds are now filled with visual images, especially those mediated by technology and delivered by commercial media" (p. 121). The teacher-researcher organized this chapter according to the theoretical basis of the present action research study, the previous methods of research in this area, and the historical context of the movement of e-readers in various educational settings.

Problem Statement

The identified problem of practice for the present action research study involved two English Language Arts (ELA) classes, predominantly white, working-class poor students of below average ability in the areas of reading comprehension and reading motivation. Electronic tablets (e-books) are available for these students to use at West High School (WHS); however, the e-books have not been studied to determine if they can address the problem of low reading comprehension scores of these 11th grade students with below average reading ability and/or low motivation to read. The participant-researcher teaches an American Literature course in which *The Great Gatsby* is a required reading on the standardized curriculum for 11th grade students mandated by the

state of South Carolina. The teacher-researcher investigated the problem of practice to describe the ways in which two different groups of students accessed the text – one using e-books and one using print books. Through the present action research study, the researcher sought to determine to what extent reading comprehension and reading motivation levels in this high school classroom can be affected using e-readers compared and contrasted with the student who read the text using traditional print books.

Participants

The teacher-researcher used a sample of approximately 44 11th grade rural students to determine what possible relationship may be found between reading comprehension levels, reading motivation levels, and electronic books. This action research study took place at a rural high school in upstate SC with the sample separated into two groups. One group read a novel in traditional print form, while the other group read the same novel on an e-reader. Both groups completed a teacher-designed post-test to compare reading comprehension levels. Both groups also completed a pre- and post-survey regarding reading motivation (AMSR) to determine if any significant difference exists between the two groups of readers.

The sample consisted of 44 11th grade students from two American Literature classes at a rural high school in upstate SC. The total possible population of 11th graders enrolled in grade-level, basic ELA classes is 149. After gaining permission from administration and parents, the participating students were enrolled in the same teacher's class, which is where the experiment takes place. Twenty-one students identified as male, while 23 identified as female. Forty-two of these students (95.5%) were classified as

white, one (2.3%) was African American, and one (2.3%) was of Hispanic/Latino descent.

Research Question

The research question that guided this study was, “What is the impact of e-reader text of *The Great Gatsby* on the reading comprehension and reading motivation levels of 11th grade students who are identified as low-ability readers?”

Purpose Statement

The primary purpose of the present action research was to compare and contrast the reading comprehension and reading motivation levels of low-ability, rural, southern secondary ELA students at West High School who experienced reading *The Great Gatsby* in two different textual forms (i.e., e-books and traditional print books). The secondary purpose was to develop an action plan that will better serve these ELA students to raise their reading comprehension levels and reading motivation levels.

Importance of a Literature Review

Mertler (2014) used Johnson’s definition of a literature review as “an examination of journal articles, ERIC documents, books, and other sources related to your action research project” (p. 60). The purpose of a literature review in a dissertation is to become aware of studies already completed in or related to this area. This can help a researcher “identify a topic, narrow its focus, and gather information for developing a research design as well as the overall project” (Mertler, 2014, p. 60). Reviewing literature is also helpful in that it can prevent repeat studies and help to lead researchers in the direction of a more specific and detailed study in order to find the most specific and valid results. According to Mertler (2014), “A review of literature can reveal a study that could be

systematically replicated in your classroom or provide you with potential solutions to the research problem you have identified” (p. 60). For example, most research found in the area of study for the current action research plan dealt primarily with the use of e-readers at the elementary or middle school levels, but not often at the secondary level. These resources give a baseline for this study at a different educational level. Ultimately, “a literature review allows you to use the insights and discoveries of others whose research came before yours in order to make your research more efficient and effective” (Mertler, 2014, p. 61).

Theoretical Framework

Comprehension

The capability of reading text is a valuable skill; however, the ability to read a text is almost useless if there is no comprehension. The RAND Reading Study Group (2002) stated that comprehension is “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p. 11).

Schema theory. In educational research, scholars have devoted considerable attention to theories of text comprehension and recall that stress the importance of pre-existing knowledge structures, or schemata (Spiro, 1977). Schema theory is the theoretical basis for the aspect of this research dealing with reading comprehension levels between students using e-readers and students reading traditional print novels. Schema theory is an explanation of how readers use prior knowledge to comprehend and learn from text (An, 2013). The term “schema” was first used in psychology as “an active organization of past reactions or experiences,” later schema was introduced in reading when discussing the important role of background knowledge in reading comprehension

(An, 2013, p. 130). According to schema theory, a reader's prior knowledge, experiences, concepts, and vocabulary significantly influence reading comprehension (Little & Box, 2011). The lack of tools to recognize terms and understand concepts present the greatest obstacle to comprehension. This opens up a large potential for e-readers to be beneficial for students with their electronic features, such as dictionaries and visual aids.

Schema theory is based on Goodman's (1967) psycholinguistic model. The psycholinguistic model views reading as a psycholinguistic guessing game, involving an interaction between thought and language based not on a precise understanding of each element within the reading, but an ability to use a partial understanding of the material to process the unknown and make decisions regarding meaning (Goodman, 1967). Proper anticipation is based upon key word understanding and schema theory indicates key words and concepts presented to the reader through the text allow the reader to temporarily transfer information stored in long-term memory to short-term memory and use that information during reading to interact with, and construct an understanding of, new information (Pressley, 2003). This information is often used to construct mental representations that allow the readers to exit the transaction with a mental image or summary of the text (Pardo, 2004).

In the past decade, researchers have given more attention to theories of reading comprehension and recall that focus on the importance of pre-existing knowledge structure or schemata. While such research is certainly valuable in the study of comprehension and the various disabilities that may affect comprehension, it is important to recognize "several shortcomings of schematic-theoretic works that may restrict its future usefulness" (Spiro, 1977, p. 1). Spiro included the following in these areas of

concern: individual differences in comprehension style; efficiency of knowledge-based processing (including issues of automaticity, immersion, cognitive economy of representation, and economical deployment of resources); and learning.

According to the nature of contents, different types of schemata have been suggested: i. formal schemata, relating to the rhetorical structure of the text; ii. Content schemata, relating to the content of a text read; and iii. Cultural schemata, more general aspects of cultural knowledge shared by larger sections of a cultural population. (An, 2013, p. 131)

These schema, or categories, influence how the reader will comprehend the text because of the relationship and previous knowledge of that reader as it relates to the text.

Transactional model. Yet another theoretical model sometimes used for understanding reading comprehension is Rosenblatt's (1978) well-known transactional model. A major idea of this theory is that a student belongs to an environment larger than just a classroom or school building. "Popular culture, including the media, is part of the environment that surrounds adolescents and offers texts with which adolescents must interact, either actively or passively" (Begoray et al., 2013, p. 123). Rosenblatt (1995) emphasized "the need for readers to be critical of the assumptions embodied" (p. 385) in a text. Students must consciously make these connections between themselves and the text.

Motivation

Motivating students is often listed as one of teacher's main concerns, particularly in the areas of reading and literacy. Many researchers have clearly suggested the need to attempt a better understanding of what increases motivation and develops students into

active and engaged readers. “A number of current theories suggest that self-perceived competence and task value are major determinants of motivation and task engagement” (Gambrell, Palmer, Codling, & Mazzoni, 1993, p. 518). For example, Eccles (1983) advanced an “expectancy-value” theory of motivation, which states that motivation is strongly influenced by one’s expectation of success or failure at a task as well as the “value” or relative attractiveness the individual places on the task.

According to Guthrie and Wigfield (1997), motivation is defined in terms of “beliefs, values, needs and goals that individuals have” (p. 5). Because of this, it stands to reason that the closer the literature or literacy activities match up to these values, needs, and goals, the better chance that students will put forth the effort to be successful.

Generally, the two strands of research on adolescent motivation to read focus on (a) Adolescents as meaning-makers in out-of-school contexts that meet their competency needs and (b) adolescents as victims of positioning by schools that have devalued literacy activities at which they are literate and competent –such as media-text, electronic games, electronic messaging, and visual productions-and instead have valued primarily print-based, content-area texts that students have difficulty comprehending. (Pitcher et al., 2007, p. 379)

In short, students tend to be more motivated to read when the text relates to their interests and values. Also, students are proven to be more motivated when their efficacy beliefs are positive and indicate a high level performance.

Self-efficacy. Albert Bandura posited that “individuals possess a self-system that enables them to exercise a measure of control over their thoughts, feelings, and actions” (Pajares, 1996, p. 543). This idea of self-efficacy, or one’s belief in one’s own

capabilities to perform on a certain level, is the basis for the motivation aspect of research in this study. This view of motivation asserts that efficacy beliefs, involving both intrinsic and extrinsic motivation, play an integral role in the decision to perform activities, and the amount of effort exerted in the chosen activities (Bandura, 1997). According to Bandura, “this self-system houses one’s cognitive and affective structures and includes the abilities to symbolize, learn from others, plan alternative strategies, regulate one’s own behavior, and engage in self-reflection” (as cited in Pajares, 1996, p. 543). According to Bandura’s (1997) social cognitive theory, a student’s thoughts of self are the go-between of knowledge and action. What a student knows, can do, and has previously learned are quite often unreliable predictors of that student’s future learning and performance. Quite simply, if a student does not believe he can perform a task well, he will not—despite the student’s actual knowledge or ability.

Expectancy-value theory. This view of motivation asserts that efficacy beliefs, involving both intrinsic and extrinsic motivation as well as the individual’s purposes of achievement, play an integral role in the decision to perform activities, and the amount of effort exerted in the chosen activities (Baker & Wigfield, 1999; Bandura, 1997). Eccles (1983) built upon this framework in developing the expectancy-value theory of motivation, which states that motivation is influenced by the participant’s expectation of failure or success, and by the attractiveness of value the participant places on the task. Ford (1992) added to the expectancy-value theory’s focus on the value of a task in his motivational systems theory, which states that participants are motivated to achieve goals they value and perceive as achievable. Reading motivation and engagement are positively affected when high-interest material is available (Jones & Brown, 2011). Students who

perceive reading to have personal value and importance engage with the text to a much greater extent (Ames & Archer, 1988). Engagement with the text is shown to be an accurate predictor of motivation to read and reading achievement (Jones & Brown, 2011).

Historical Context

With the ever-increasing amount of technology offered in the field of education, it is no surprise that electronic books—also known as e-books or e-readers—are becoming more and more common in all levels of education. From primary grades all the way to secondary schools and above to higher education, e-books are becoming a topic of conversation for economic reasons, as well as an improvement to K-12 schooling's curriculum and pedagogy.

Movement Toward E-Books

Wholesale e-book sales started at under \$2 million per quarter in 2002 and had risen to \$8 million per quarter by 2008 (Grudzien & Casey, 2008). In 2009, the Association of American Publishers reported that e-books still accounted for a very small percentage of total book sales, but their popularity has increased drastically and the increased availability and use of e-readers are continuing to contribute to the expansion. U.S. trade electronic book sales in 2010 exceeded \$340 million (International Digital Publishing Forum, 2011). According to Amazon, their site sold 105 e-books for every 100 traditional print books in 2011 (Miller & Bosman, 2011). Amazon's predictions indicated that few than 25% of books sold will have print versions within a decade's time (Miller & Bosman, 2011).

Because the use of electronic books is becoming increasingly popular in today's technological age, more and more academic settings are transitioning to the use of such

technology as opposed to traditional print texts. Many major publishing companies have begun offering digital versions of their texts while some colleges and universities now charge students a mandatory course materials fee that includes the use of an e-book for courses (Young, 2010). A 2010 survey indicated that almost every college student owns both a computer and a phone, while 80% own a laptop (Smith & Caruso, 2010). This popularity in technology is encouraging publishers to provide materials that can be accessed using laptops, tablets, and smartphones (Chesser, 2011). School districts are making similar moves towards this type of change. With continued and increasing use of technology in the K-12 setting, it only stands to reason that the idea of transitioning to e-books would come into debate. Estimates have indicated that digital textbooks will be the dominant format inside of 7 years, with revenue exceeding \$1.5 billion within 5 years (Reynolds, 2011).

Many estimates are based on the expanding Apple iPad market, yet there is a lack of research establishing the effect of tablet computers on reading comprehension and reading motivation. Significant differences in projections highlight the fact that these estimates are based on sales of electronic devices, and not on academic performance. Projections have offered no data proving that sales will increase as a result of students displaying increased comprehension or motivation. Student performance could affect purchasing, especially with the K-12 environment.

E-books at college level. The movement to make the transition to electronic books is being led by college and university libraries across the country. The University of Texas at Austin conducted a trial in which 1,200 students were provided Amazon's Kindle e-reader as a replacement for traditional textbooks (Butler, 2009). Students listed

screen size as a significant restriction (Butler, 2009). The small size of the screens made the devices unsuitable to most textbooks and was especially problematic with science texts. A trial involving 500 students at Northwest Missouri State University replaced traditional textbooks with electronic texts using Sony e-readers, with the goal of utilizing electronic textbooks for all courses within 5 years (Butler, 2009). Dozens of the participants quit the trial after 2 weeks, citing the inability to flip through pages randomly, take notes in the margins, and highlight the text as determining factors in their decisions to purchase a print copy (Knutson & Fowler, 2009). Student focus groups reported that the devices were not adequate to replace print textbooks, and the university transitioned to using laptops as the delivery devices in a further study (Tees, 2010).

The University of Illinois conducted a trial in which nursing students were provided e -book access on their Personal Digital Assistants (Williams & Dittmer, 2009). In this study, the researchers focused on the aspects of portability and accessibility. Students reported that it was beneficial to have such convenient access to information, but listed the limited eight hour battery life of the device as a considerable challenge since nursing shifts were generally longer than eight hours (Williams & Dittmer, 2009). These studies at the college level focused on convenience and usability as opposed to academic performance. These studies did not include a specific measurement of student reading comprehension or motivation, and the researchers focused solely on determining the reasons for student preferences.

E-books at elementary school level. A focal point in e-book research at the elementary level has been the effect of technology on low socioeconomic status kindergarten students (Korat, Segal-Drori, & Klein, 2009). These researchers attempted

to determine if the students' lack of access and experience regarding these devices prevented the devices from positively impacting student achievement in the classroom. Students using electronic books were found to display increased motivation to read, increased curiosity regarding both the device and the books available using the device, and increased literacy development (Korat et al., 2009).

Larson (2010) conducted a similar study at the second grade level, with some students reading traditional print books while others were provided access to an e-reader and e-books. All students participated in an online discussion board to determine their level of understanding. Results indicated that the students who read the story using the e-reader displayed increased literacy development and increased motivation when compared to those students who had read traditional print versions (Larson, 2010).

An analysis of e-books at the elementary level reports mixed results for their effectiveness in pre-K to Grade 5 (Zucker, Moody, & McKenna, 2009). For this analysis, the e-book was required to present a text on a computer and include an oral reading option and hypermedia (Zucker et al., 2009). Results of the analysis indicated that the practical effects of this technology are significant in terms of reading motivation, but are moderate to small for comprehension outcomes. The conflicting results with respect to reading comprehension highlight an area of conflict for Rosenblatt's transactional theory of reader response. Rosenblatt (1995) indicated that the transactional process applies to transactions using any media. Other researchers, however, have cited the tools provided in the electronic format as a reason for improved interactions between reader and text in this format, and have used Rosenblatt's theory as a basis for explaining how surface features improve transaction (Larson, 2009; Pardo, 2004).

E-books at middle school level. Fisher, Lapp, and Wood (2011) studied 100 eighth grade students reading science and social studies information in both the electronic and paper formats. Students completed the readings and then responded to questions in order to assess their comprehension. The researchers observed no significant differences between the groups on questions related to main themes, but the students using e-readers performed significantly poorer on questions related to specific details (Fisher et al., 2011).

Benefits and Limitations of E-Readers

Most researchers conducting studies on the use of e-readers have focused on convenience of use, accessibility, and reader preference. Such authors have listed accessibility, portability, and storage as significant benefits (Clark, Goodwin, Samuelson, & Coker, 2008). In contrast, discomfort with reading from a screen, inability to highlight and take notes within the text, and the fact that many students simply prefer printed books are significant limitations (Clark et al., 2008).

Benefits of e-books. Numerous benefits can be found in the use of e-books. Tracey and Morrow (2002) viewed the content of a text—especially the difficulty or readability based upon font size and type—as a factor in reader-text interaction and comprehension. E-books have the capability to negate font distractions by allowing individual readers to adjust surface features (Larson, 2009). In addition, e-books have been described as being convenient, lightweight, environmentally friendly, portable, and easily stored (Clark et al., 2008). Because they are downloadable, e-book users also never face the problem of books being out of stock (Crestani, Landoni, & Melucci, 2005).

Additional advantages are updated book versions, linkage of passages, and key word searchability (Crestani et al., 2005).

Limitations of e-books. As expected, problems have also been reported with the use of e-books. Reading from a screen can cause greater eye fatigue (Clark et al., 2008). Students have indicated that they are more likely to skim electronic texts, choosing the read in an “F” pattern searching for key words rather than line-by-line reading (Woody, Daniel, & Baker, 2010). Students cited difficulty in taking notes using an e-book as a significant negative (Polanka, 2011). Three quarters of paper readers report marking notes in paper text as they read, while digital readers report the problem of having to type notes on a separate computer or use additional paper (Polanka, 2011).

Limitations noted here all related to usability, not academic performance. Eye fatigue is an issue with electronic devices, but included data contains no information regarding the comprehension of what is being read. The fact that students are more likely to skim electronic texts may harm comprehension, but it is necessary to determine if comprehension is affected in situations where students choose to read carefully

Conclusion

In Chapter Two, the researcher focused on the scholarly literature on the use of electronic books and e-readers. These devices have clearly gained popularity over the last decade, and their impact on students’ reading comprehension and students’ reading motivation. Electronic books were theoretically framed and historically contextualized in this chapter. Through the review of scholarly literature, the researcher anticipates that e-books popularity will continue to rise in personal use, as well as in the field of education. There is abundant information regarding the use of e-books at the college level. None of

that research speaks to academic performance, but rather convenience and usability. The existing research at the elementary and middle school levels is limited. Some scholars have focused on academic achievement, specifically reading comprehension, while others have only focused on student preference of traditional print or electronic book. There is very little research regarding the questions of reading comprehension and motivation to read on the secondary level when e-books are used.

CHAPTER THREE: METHODOLOGY

Introduction

The identified problem of practice for this Dissertation in Practice (DiP) was the impact of electronic reading sources on reading comprehension and reading motivation in an 11th grade English language arts (ELA) class. Begoray et al. (2013) claimed that “adolescents’ worlds are now filled with visual images, especially those mediated by technology and delivered by commercial media” (p. 121). In the present action research study, the researcher compared the use of electronic books against the use of traditional print books and the effect the difference has on reading comprehension and reading motivation in 11th grade English students. The purpose of this study was to determine if there is a causal relationship between these variables and, if so, possibly use that research to develop best practices for teaching novels in an 11th grade American Literature class. By reviewing the available literature on related research, most similar studies have been completed at the elementary (Korat & Shamir, 2007), middle, and college levels (Balajthy, 2007).

Problem Statement

The identified problem of practice for the present action research study involved two English Language Arts (ELA) classes of below average reading ability, predominantly white, working-class poor students in the areas of reading comprehension and motivation. Electronic tablets (e-books) are available for these students to use at West High School (WHS); however, the e-books have not been studied to determine if

they can address the problem of low reading comprehension scores of these 11th grade students with below average reading ability and/or low motivation to read. The participant-researcher teaches an American Literature course in which *The Great Gatsby* is a required reading on the standardized curriculum for 11th grade students mandated by the state of South Carolina. The researcher investigated the problem in order to describe the ways in which two different groups of students accessed the text, one using e-books and one using print books. Through the present action research study, the teacher-researcher sought to determine to what extent reading comprehension and reading motivation levels in this high school were affected using e-readers compared and contrasted with the student who read the text using traditional print books.

Research Question

In order to guide this study, the researcher developed one research question, which was, “What is the impact of e-reader text of *The Great Gatsby* on the reading comprehension and reading motivation levels of 11th grade students who are identified as low-ability readers?”

Purpose Statement

The primary purpose of the present action research was to compare and contrast the reading comprehension and motivation levels of low-ability, rural, southern secondary ELA students at West High School who experienced reading *The Great Gatsby* in two different textual forms (i.e., e-books and traditional print books). The secondary purpose was to develop an action plan that will better serve these ELA students to raise their reading comprehension levels and reading motivation levels.

Action Research Design

“In quantitative research, describing a trend means that the research problem can be answered best by a study in which the researcher seeks to establish the overall tendency of responses from individuals and to note how this tendency varies among people” (Creswell, 2008, p. 51). The teacher-researcher used quantitative research as a more appropriate research method for the present action research study because the statistical information obtained from post-tests of each group gave a more certain and more reliable idea of a causal relationship between types of reading material, reading comprehension, and reading motivation. The teacher-researcher also analyzed the comparison of changes in reading motivation surveys from before and after reading in order to determine any statistical differences.

Researcher

The teacher-researcher served as the main contact and advisor in the present action research study. She was the main technology advisor for the e-readers and participated in the study in a teacher role, as the student-participants were all students in her American Literature classroom. The teacher-researcher administered all surveys (pre- and post), and recorded, filed, and analyzed all student responses. This was also the case with the teacher-designed reading comprehension test and those resulting scores.

The teacher-researcher supplied highlighters, post-it notes, and writing utensils for the Print group to use, while briefly describing the features of the e-book for the E-reader group (digital dictionary, pronunciation tools, etc.). These options were available to student-participants, but were not required to be used.

Personal challenges for the teacher-researcher were minimal. The teacher actually prefers to read from traditional print form, if expected to learn or absorb the information. E-readers are fine if reading simply for pleasure and not to learn. The expectation would be that student-participants would automatically choose to use the more modern and technologically advanced equipment as it seems more interesting and flashy—more in line with today’s technology such as cell phones or iPads. This was not always the case; some student-participants preferred the traditional print form.

Sample

The teacher-researcher used a sample of approximately 44 11th grade rural students to determine what possible relationship may be found between reading comprehension levels, reading motivation levels, and electronic books. This action research study took place at a rural high school in upstate South Carolina, with the sample separated into two groups. One group read a novel in traditional print form, while the other group read the same novel on an e-reader. Both groups completed a teacher-designed post-test to compare reading comprehension levels. Both groups also completed a pre- and post- survey (AMSR) regarding reading motivation to determine if any significant difference exists between the two groups of readers.

The sample consisted of 44 11th grade students whom the teacher-researcher chose from two American Literature classes at a rural high school in upstate SC. The total possible population of 11th graders enrolled in grade-level, basic ELA classes is 149. After gaining permission from administration and parents, the participating students were enrolled in the same teacher’s class, which is where the experiment takes place. Twenty-one students identified as male, while 23 identified as female. Forty-two of these students

(95.5%) were classified as white, one (2.3%) was African American, and one (2.3%) was of Hispanic/Latino descent. Six students have IEPs in place with the school's Special Education department.

Mertler (2014) posited that “prior to collecting any data—especially if you are doing so *outside* of the normal, routine activities of a classroom teacher—you should obtain permission from both parents and the students themselves” (p. 150). While the actions of this research were not all that far outside of the normal, routine activities of a classroom teacher, the teacher-researcher still obtained permission from all involved. The teacher-researcher obtained permission from school and district personnel to conduct research (see Appendices C & D). The teacher-researcher obtained permission from students and parents via the appropriate consent and assent forms (see Appendices A & B). The teacher-researcher ensured that the conditions of the study were clear to students and parents. Participation was completely voluntary and students or parents were able to remove participants from the study at any time.

Researchers collecting data using human participants “must ensure that you keep those data secure and confidential” (Mertler, 2014, p. 151). To ensure confidentiality and anonymity in this action research study, the teacher-researcher assigned the names of participants a number and coded them. The researcher kept a master list of assigned numbers and names in a locked cabinet and available only to the teacher-researcher. This ensured anonymity to participants and guaranteed that student-participants were unable to be identified by any individual outside of the research study.

Setting

West High School is located in a rural part of the upstate of South Carolina. The school's current enrollment is approximately 1,000 students. The school's demographic is consistent with that of the town of West Orchard (pseudonym), which is located in SC. There are approximately 2,400 people in West Orchard and the County of Keowee (pseudonym) has approximately 75,000 people (U.S. Census Bureau, 2013). Demographic data shows that the town of West Orchard's population is 83.1% white, 10.7% African American, and 6.2% Hispanic or Latino (U.S. Census Bureau, 2013). County demographic data indicates a population that is 87.4% white, 7.8% African American, and 4.8% Hispanic or Latino (U.S. Census Bureau, 2013).

The study was conducted over approximately a 5-week period. Students attended their American Literature classes as normal and were assigned to read the classic novel, *The Great Gatsby*. Roughly half of the sample (one class of 24) read the novel using e-readers (specifically Nooks) and the remaining students (the other class of 20) read the novel in traditional print format.

Instrumentation and Materials

The teacher-researcher collected data for the present action research study from several sources. The teacher-researcher obtained student Lexile scores and MAP Test scores from the school district's student database. Students also completed post-only teacher-designed reading comprehension tests (see Appendix F) to determine if a certain group scored a higher overall average. This test was proctored by the teacher-researcher in the regular ELA classroom like any other test taken by the student-participants. The

test consisted of 50 questions (a mixture of multiple-choice and true/false) that addressed recall of facts and comprehension in the novel.

Student-participants completed the Adolescent Motivations for School Reading (AMSR) survey (see Appendix E) regarding reading motivation both before and after reading the novel, *The Great Gatsby*. The survey was designed by Coddington and Guthrie (2009) and used a simple Likert scale. The teacher-researcher obtained permission to use this survey from Guthrie. The AMSR asks questions regarding student interest and/or motivation for reading in their English/Language Arts classes. The survey questions address six main constructs affecting motivation to read: (a) intrinsic motivation, (b) avoidance, (c) self-efficacy, (d) perceived difficulty, (e) prosocial interactions, and (f) antisocial interactions. “Students are told that readings for school can include any of the following: non-fiction books, fiction books, textbooks, Web sites, newspapers, or magazines” (Coddington & Guthrie, 2009). Students read the statements and responded to each item by circling the most accurate reflection their feelings on a scale of 1 to 4 (1 = *Not at all like me*, 2 = *Not like me*, 3 = *Somewhat like me*, 4 = *A lot like me*). The teacher-researcher recorded and coded the student-participant responses based on the mean response for each construct. The teacher-researcher compared the mean responses of both groups for each construct to determine if any significant difference existed.

The teacher-researcher conducted face-to-face personal interviews with students to obtain a more in-depth understanding of what motivates these particular students to read and what plans they may have for the future. Interviews took place in the classroom setting between the teacher-researcher and student-participants while other students were

completing assigned reading and/or classwork. The setting was informal and casual. Student-participant responses were recorded by the researcher and reviewed with survey responses.

Data Collection

The teacher-researcher separated a sample of 11th graders into two groups: one group (one class of 24) read *The Great Gatsby* on electronic readers, while the other group (the other class of 20) read the same novel in traditional print form. The total study contained 44 11th grade students who were enrolled in the same level American Literature class with the same teacher at a rural high school in upstate South Carolina. All students were tested using a teacher-designed reading comprehension test after completion of the novel. Scores were compared between the E-reader group and the Print group. All students are welso given the Adolescent Motivations for School Reading questionnaire (AMSR) regarding reading motivation before and after the reading. Score differences of the surveys were compared between the E-reader group and the Print group. Reading of the novel, survey administration, and reading comprehension test administration all took place during the students' American Literature class with the teacher-researcher.

Reading motivation: Survey plan. Prior to reading the novel, students completed a survey regarding reading motivation. The survey, Adolescent Motivations for School Reading (AMSR), was designed by Coddington and Guthrie (2009) and uses a simple Likert type scale. The teacher-researcher obtained permission to use this survey from John T. Guthrie. After reading the novel, students completed the same survey. The teacher-researcher noted any differentiation in responses between both groups.

Reading comprehension: Test plan. After reading the novel, students took a post-test to assess reading comprehension. The teacher-researcher scored the tests and analyzed the scores based on performance in each group. Through this data analysis, the teacher-researcher determined if a causal relationship exists between these 11th grade students' reading comprehension and reading motivation and the method of delivery.

Data Analysis & Reflection

The teacher-researcher analyzed the data, recorded the survey response, and calculated the mean responses. The researcher then compared the mean responses for each group and calculated the difference in those means. The teacher-researcher averaged the mean reading comprehension scores for each group to find the mean score for each group. The researcher compared and calculated those scores for standard deviation. The teacher-researcher performed a simple *t*-test between mean reading comprehension scores to determine if the differences were statistically significant. The teacher-researcher shared results with student-participants during regular classroom time and asked for feedback regarding results.

Conclusion

In Chapter Three, the researcher detailed the methodology of the present action research study regarding the use of e-readers in high schools and their impact on students' reading comprehension and students' reading motivation. This chapter included a description of the action research methodology and the data analysis plan.

CHAPTER FOUR: FINDINGS & IMPLICATIONS

Introduction

Chapter Four includes the findings and implications of the findings for the present action research study, including data analysis techniques, coding, and themes. The chapter begins with a brief overview of the identified problem of practice, research question, and the purpose of the research. In this study, the researcher examined the impact of electronic books (e-readers) on the reading motivation levels and reading comprehension levels of 11th grade English Language Arts students identified as “below average” in reading.

Problem of Practice

These students were identified as “below average” by the South Carolina MAP Test which was administered to these students when they were in the tenth grade. The research site made e-books available to these students; however, the e-books had not been studied to determine if they can be effectively utilized to address the problem of low reading comprehension scores and low reading motivation levels.

The participant-researcher teaches an American Literature course at WHS in which *The Great Gatsby* is a required reading on the SC standardized curriculum for 11th grade students regardless of perceived ability by the MAP test. In Chapter Four, the researcher will present the findings associated with this local and particular group of students in the participant-researcher’s course and e-books. Specifically, the students read F. Scott Fitzgerald’s American classic during the fall 2016 semester. Data collected

represented the complex challenges of enabling students to be motivated to read as well as increasing their reading comprehension test scores.

Purpose Statement

The purpose of the study was to describe to what extent reading comprehension and reading motivation levels among a group of 11th grade low-ability reading students can be affected using e-readers. The researcher also sought to determine to what extent traditional print books can affect reading comprehension and reading motivation as determined by a teacher-designed reading comprehension test, personal interviews, and the motivational survey Adolescent Motivations for School Reading (AMSR; Coddington & Guthrie, 2009).

Research Question

The researcher developed one question to guide this study. This question was, “What is the impact of e-reader text of *The Great Gatsby* on the reading comprehension and reading motivation levels of 11th grade students who are identified as low-ability readers?”

Data Collection Strategy

The researcher separated a sample of 11th graders into two groups: one group read *The Great Gatsby* on electronic readers, while the other group read the same novel in traditional print form. Both groups of students are identified as “low-ability” readers on scores of reading comprehension as measured by the SC MAP Test in their 10th grade year. The teacher-researcher separated the groups based on the students’ already assigned schedules. With the reading ability levels matching up between both classes, the teacher-

researcher simply chose to have one class use the e-readers and have the other class use traditional print books.

The student-participants included 44 11th grade students who are enrolled in the same level American Literature class with the same teacher at WHS, a rural high school located in the Upstate region of South Carolina. The researcher compared scores were between the e-book group and the traditional print book group. All students completed the AMSR (see Appendix E) that asked questions about students' opinions of their own motivation to read texts that are assigned by the school, before and after the reading of *The Great Gatsby*. The survey responses are described in Tables 4.1 and 4.2 in this chapter. After completion of the novel, the researcher tested all students using a teacher-created reading comprehension test (see Appendix F). Reading of the novel and the administration of the student-participant surveys and reading comprehension tests took place during the students' American Literature class in conjunction with the participant-researcher. Personal discussions between students and the teacher-researcher also took place in the classroom. No outside time was required of the student participants. What follows is a discussion of the AMSR survey results and reading comprehension test scores.

Ongoing Analysis & Reflection

Early analysis and interpretation of the AMSR responses showed that all student-participants (in both E-reader and Print groups) displayed low levels of motivation to read. In personal interviews with the teacher-researcher, student-participants also shared feelings of frustration, boredom, and lack of interest in required readings for their American Literature class. In general, students seemed excited about the use of e-readers.

These are similar to the smart phones that most students own today. Because of this similarity, students shared feeling more comfortable with this use of e-readers. The students reported that books feel daunting and difficult, while e-readers felt more like taking the text one page at a time. The researcher assumed that e-readers would increase motivation to complete the reading in student-participants, and that this increase in motivation would lead to improved reading comprehension scores.

Reflective Stance

Reflection during the course of the study revealed few changes. No changes occurred to data collection strategies during the analysis process. The only gaps or holes in the data were those of student-participants who left the study, for whatever reason (transferred schools, dropped out, expulsion). The loss of these participants would likely not have changed the study results drastically in one direction or another, but these gaps must be noted.

Data Analysis

An average Lexile score for an 11th grader is considered to be 940 to 1210. The Print reader group includes 20 students, the majority of whom fall below average reading ability. Six students in the Print reader group fall within this average Lexile level. Fourteen students have Lexile levels below the average. The teacher-researcher alone analyzed the data, recorded the survey responses, and calculated the mean responses for each group. The researcher then compared mean responses for each group (Print and E-reader) and calculated the differences in those means. The researcher averaged reading comprehension scores for each group to find the mean score for each group. The researcher compared and calculated the standard deviation of these values. The researcher

performed a simple *t*-test between mean reading comprehension scores to determine if the differences were statistically significant. The teacher-researcher shared results with student-participants during regular classroom time and asked for feedback regarding results.

Data Interpretation

Reading Motivation

Student-participants completed the Adolescent Motivations for School Reading (AMSR) survey (see Appendix E) regarding reading motivation both before and after reading the novel, *The Great Gatsby*. The survey was designed by Coddington and Guthrie (2009) and used a simple Likert scale. The teacher-researcher obtained permission to use this survey from John T. Guthrie. The AMSR asks questions regarding student interest and/or motivation for reading in their English/Language Arts classes. The survey questions address six main constructs affecting motivation to read: (a) intrinsic motivation, (b) avoidance, (c) self-efficacy, (d) perceived difficulty, (e) prosocial interactions, and (f) antisocial interactions. “Students are told that readings for school can include any of the following: non-fiction books, fiction books, textbooks, Web sites, newspapers, or magazines” (Coddington & Guthrie, 2009). Students read the statements and responded to each item by circling the most accurate reflection their feelings on a scale of 1 to 4 (1 = *Not at all like me*, 2 = *Not like me*, 3 = *Somewhat like me*, 4 = *A lot like me*). The researcher recorded and coded the student-participant responses based on the mean response for each construct. The researcher compared the mean responses of both groups for each construct to determine if any significant difference existed.

The following tables show the average (mean) responses given by each class.

Table 4.1 shows the responses of the Print reader group, which used a traditional print book in their reading of *The Great Gatsby*. An average Lexile score for an 11th grader is considered to be 940 to 1210. The Print reader group includes 20 students, the majority of whom fall below average reading ability. Six students in the Print reader group fall within this average Lexile level. Fourteen students have Lexile levels below the average.

Table 4.1

Comparison of Pre- and Post-Survey Responses of the Print Reader Group Using Traditional Print book

Construct	Mean Response (Pre-reading)	Mean Response (Post-Reading)	Difference
Intrinsic Motivation	2.36	2.31	-0.05
Avoidance	2.96	2.88	-0.08
Self-Efficacy	2.54	2.75	+0.21
Perceived Difficulty	2.6	2.46	-0.14
Prosocial Interactions	2.65	2.68	+0.03
Antisocial Interactions	2.42	2.32	-0.1

Table 4.2 shows the same information, but for the E-reader group, which used e-books for their reading of *The Great Gatsby*. Six students in the E-reader group fall within the average Lexile level. Sixteen students have Lexile levels below the average, according to SC MAP testing.

Table 4.2

Comparison of Pre- and Post-Survey Responses of the E-reader Group Using E-book.

Construct	Mean Response (Pre-reading)	Mean Response (Post-Reading)	Difference
Intrinsic Motivation	2.47	2.62	+0.15
Avoidance	2.62	2.65	+0.03
Self-Efficacy	3.07	3.32	+0.25
Perceived Difficulty	1.97	2.12	+0.15
Prosocial Interactions	2.55	2.66	+0.11
Antisocial Interactions	2.23	2.35	+0.12

Reading Comprehension

After reading *The Great Gatsby*, students took a teacher-designed post-test to assess reading comprehension (see Appendix F). The researcher scored the tests and analyzed the scores based on performance in each group. Figure 4.1 shows the average reading comprehension score of participant classes after reading *The Great Gatsby* in either traditional print (Print reader group) or e-book format (E-reader group).

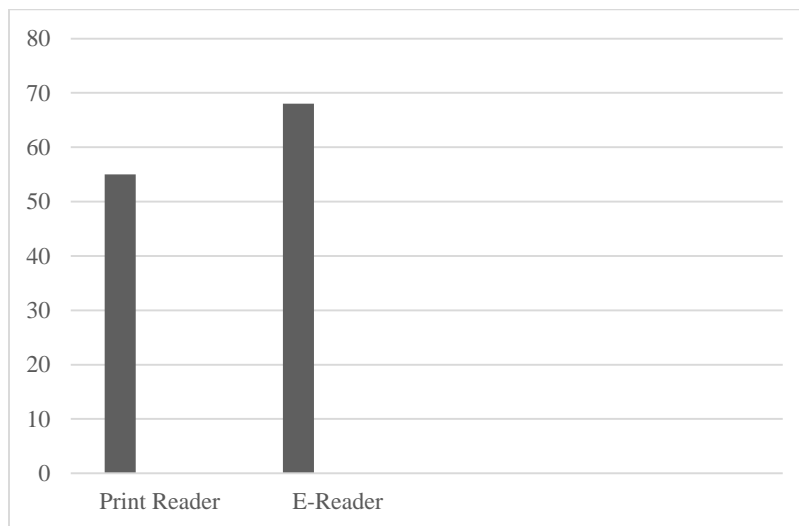


Figure 4.1. Comparison of reading comprehension scores between classes.

Answering the Research Question

Over the duration of this Action Research study, the data has been fairly consistent, with only a few differences.

Reading Motivation Surveys

For the Print reader group, who read the novel in a traditional printed book format, all constructs measured by the AMSR (intrinsic motivation, avoidance, self-efficacy, perceived difficulty, prosocial interactions, and antisocial interactions)

decreased between the pre- and post-reading surveys. Their intrinsic motivation feelings decreased (a difference of -0.05, see Appendix G for full results). Avoidance questions indicated that students would choose easier books than *The Great Gatsby*. In personal interviews, students responded they saw no true purpose for reading school assigned texts and would rather do other things. This indicated that students are not motivated by traditional print forms. While their motivation to read on e-readers was not significantly higher, a higher level of motivation did exist in the E-reader group than the Print group. This may be explained by Bandura's (1997) view of motivation that asserts that efficacy beliefs, involving both intrinsic and extrinsic motivation play an integral role in the decision to perform activities, and the amount of effort exerted in the chosen activities.

The results for the E-reader group showed a different pattern. Average responses for all positive constructs addressed by the reading motivation survey increased: intrinsic motivation by +0.15, self-efficacy by +0.25, and prosocial interactions by +0.11 (see Appendix H for full results). Students' responses indicate that they do not find in-class required texts too difficult to comprehend, and their tendency to avoid required reading showed a decrease (-0.29). Personal interviews with students indicated a very positive attitude toward e-books claiming they are easier, not as boring, and help with comprehension and focus. This indicates that e-readers increased motivations to complete required readings. "A number of current theories suggest that self-perceived competence and task value are major determinants of motivation and task engagement" (Gambrell et al., 1993, p. 518). Eccles (1983) advanced an "expectancy-value" theory of motivation, which states that motivation is strongly influenced by one's expectation of success or

failure at a task as well as the “value” or relative attractiveness the individual places on the task.

Reading Comprehension Tests

Scores on reading comprehension tests for both classes were low, which is to be expected from students with average or below average reading levels who are not aided with class discussion, as these students were not. Normally, the teacher-researcher would discuss the novel as the class progressed through it to help with understanding and comprehension. For the purpose of the present action research study, student-participants read the novel individually as to prevent classroom instruction from affecting reading comprehension scores. The average score for the Print reader group was 54.5, while the average score for the E-reader group was 67.75. These results indicated that students who read *The Great Gatsby* on e-readers had higher average scores on reading comprehension tests. This indicates that the student-participants in the E-reader group comprehended the novel more completely than the Print group, based on their mean scores.

Schema theory is based on Goodman’s (1967) psycholinguistic model. The psycholinguistic model views reading as a guessing game, involving an interaction between thought and language based not on a precise understanding of each element within the reading, but an ability to use a partial understanding of the material to process the unknown and make decisions regarding meaning (Goodman, 1967).

A major idea of Rosenblatt’s (1978) transactional theory is that a student belongs to an environment larger than just a classroom or school building. “Popular culture, including the media, is part of the environment that surrounds adolescents and offers texts with which adolescents must interact, either actively or passively” (Begoray et al., 2013,

p. 123). Rosenblatt (1995) emphasized “the need for readers to be critical of the assumptions embodied” (p. 385) in a text. Students must consciously make these connections between themselves and the text.

With reading levels being comparatively the same between both classes, these results show that the group of students who used the e-readers responded more positively regarding their motivations to read, as well as scored higher, on average, on their reading comprehension tests. These results indicate that e-readers had a positive impact on the reading motivation and reading comprehension of 11th graders at WHS in the fall 2016.

Conclusion

Based on the results of the Action Research study, students who read *The Great Gatsby* using e-readers had higher reading comprehension scores and showed increases in their reading motivation levels as defined by the AMSR. According to the data analysis, e-readers benefit 11th grade students of below average reading levels at WHS. E-readers boosted reading comprehension and increased students’ motivation to complete the reading of their required texts.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, & ACTION PLAN

Introduction

In Chapter Five, the researcher presents the summary and conclusions of the data analysis and the subsequent Action Plan. The chapter begins with an overview of the study, followed by key questions that led to the Action Plan, and a discussion of the Action Researcher's leadership role in the Action Plan. The chapter concludes with the researcher's suggestions for future research.

Overview of the Study

These students were identified as "below average" by the South Carolina Measures of Academic Progress (MAP) Test, which was administered to these students when they were in the tenth grade. The research site made e-books available to these students; however, the e-books had not been studied to determine if they can be effectively utilized to address the problem of low reading comprehension scores and low reading motivation levels.

The sample consisted of 44 11th grade students whom the researcher chose from two American Literature classes at a rural high school in upstate SC. The total possible population of 11th graders enrolled in the teacher-researcher's grade-level English Language Arts classes was 149. The participating students were enrolled in the same teacher's class, which is where the experiment took place, after gaining permission from administration and parents. Twenty-one students identified as male while 23 identified as

female. Forty-two of these students (95.5%) are classified as white, one (2.3%) is African American, and one (2.3%) is of Hispanic/Latino descent.

The participant-researcher teaches an American Literature course at WHS in which *The Great Gatsby* is a required reading on the SC standardized curriculum for 11th grade students regardless of perceived ability by the MAP test. In Chapter Five, the researcher will present the findings associated with this local and particular group of students in the participant-researcher's course and e-books. Specifically, the students read F. Scott Fitzgerald's novel during the fall 2016 semester. Data collected represented the complex challenges of enabling students to be motivated to read as well as increasing their reading comprehension test scores.

Research Question

The research question that guided this study was, "What is the impact of e-reader text of *The Great Gatsby* on the reading comprehension and reading motivation levels of 11th grade students who are identified as low-ability readers?" The purpose of the study was to describe to what extent reading comprehension and reading motivation levels among a group of 11th grade low-ability reading students can be affected using e-readers. The researcher also sought to determine to what extent traditional print books can affect reading comprehension and reading motivation as determined by a teacher-designed reading comprehension test, personal interviews, and the motivational survey Adolescent Motivations for School Reading (AMSR; Coddington & Guthrie, 2009).

Key Questions

The key questions that emerged from the findings are:

1. How can West High School better use e-readers in the future with special needs students in ELA?
2. How can West High School do better at enabling low reading ability students to be motivated to read using e-readers?
3. How can West High School do better at relating material in required texts to the lives of these students?
4. Would West High School have funding available for purchase of more e-readers to further research in this area?

Action Researcher

Role of the Researcher

The teacher-researcher served as the main contact and advisor in the present action research study. The researcher was the main technology advisor for the e-readers and participated in the study in a teacher role, as the student-participants were all students in the researcher's American Literature classroom. The teacher-researcher administered all surveys (pre- and post), and recorded, filed, and analyzed student responses. This was also the case with the teacher-designed reading comprehension test and those resulting scores.

The teacher-researcher supplied highlighters, post-it notes, and writing utensils for the Print group to use, while briefly describing the features of the e-book for the E-reader group (digital dictionary, pronunciation tools, etc.). These options were made available to student-participants, but were not required to be used. Personal challenges for the teacher-researcher were minimal, but did exist. A few challenges existed as the researcher was both the researcher and the teacher of these students. The responsibilities

of both roles overlapped significantly. The researcher's greatest challenge was overcoming her preconceived notion regarding the students' preferences with e-readers. My expectation was that student-participants would automatically choose to use the more modern and technologically advanced equipment as it seems more interesting and flash—more in line with today's technology such as cell phones or iPads. This was not always the case. Some student-participants preferred the traditional print form, as well. The research environment was also an obstacle, as some students were often absent or tardy to class. These students would then have to make up that time or be behind their classmates in the research process. The possibility that this affected student-participants' responses and/or understanding of the text must be noted. The teacher-researcher was challenged to remain as unbiased as possible while wanting to make sure student-participants are being justly served as their teacher.

Developing an Action Plan

Reading Motivation Surveys

After completing the reading motivation surveys both before and after the reading of *The Great Gatsby*, the researcher compared the difference in means between the two groups. For the Print group, who read the novel in a traditional printed book format, all constructs of the survey decreased between the pre- and post-reading surveys. Their intrinsic motivation feelings decreased (a difference of -0.05, see Appendix G for full results). Avoidance questions indicated that students would choose easier books than *The Great Gatsby*. In personal interviews, the students responded that they saw no true purpose for reading school assigned texts and would rather do other things.

The results for the E-reader group showed a different pattern. Average responses for all positive constructs addressed by the reading motivation survey increased: intrinsic motivation by +0.15, self-efficacy by +0.25, and prosocial interactions by +0.11 (see Appendix H for full results). Students' responses indicated that they do not find in-class required texts too difficult to comprehend, and their tendency to avoid required reading shows a decrease (-0.29). Personal interviews with students indicated a very positive attitude toward e-books, claiming they are easier, not as boring, and help with comprehension and focus. Despite the positive response and increase in motivation levels based on the given survey, the differences are not statistically significant enough to suggest that they are due to anything but chance between the two groups.

The expectancy-value theory of motivation asserts that efficacy beliefs— involving both intrinsic and extrinsic motivation as well as the individual's purposes of achievement—play an integral role in the decision to perform activities, and the amount of effort exerted in the chosen activities (Baker & Wigfield, 1999; Bandura, 1997). Eccles (1983) built upon this framework in developing the expectancy-value theory of motivation, which states that motivation is influenced by the participant's expectation of failure or success, and by the attractiveness of value the participant places on the task.

Reading Comprehension Tests

Scores on reading comprehension tests for both classes were low, which is to be expected from students with average or below average reading levels who are not aided with class discussion, as these students were not. Normally, the teacher-researcher would discuss the novel as the class progressed through the reading to help with understanding and comprehension. For the purpose of the present action research study, student-

participants read the novel individually as to prevent classroom instruction from affecting reading comprehension scores. The average score for the Print reader group was 54.85, while the average score for the E-reader group was 67.75. These results show that students who read *The Great Gatsby* on e-readers had higher average scores on reading comprehension tests. The standard deviations for the Print and E-readers groups were 9.79 and 14.0, respectively. Mean analysis of these two groups in a simple *t*-test yielded a *p*-value of 0.00, indicating that the difference in reading comprehension levels is not statistically significant.

In the past decade, more attention has been given to theories of reading comprehension and recall that focus on the importance of pre-existing knowledge structure or schemata. While such research is certainly valuable in the study of comprehension and the various disabilities that may affect comprehension, “several shortcomings of schematic-theoretic works that may restrict its future usefulness” (Spiro, 1977, p. 1) must be discussed. Spiro cited the following areas of concern: individual differences in comprehension style; efficiency of knowledge-based processing (including issues of automaticity, immersion, cognitive economy of representation, and economical deployment of resources); and learning.

With average reading levels (according to MAP Test scores) being comparable between both classes, these results illustrate that the group of students who used the e-readers responded more positively regarding their motivations to read, as well as scored higher, on average, on their reading comprehension tests. These results indicate that e-readers did have a positive impact on the reading motivation and reading comprehension of 11th graders at WHS in fall 2016, even if the impact was not statistically significant.

Action Plan

The researcher will share these findings with the English department of WHS, where research was conducted, in order to provide these teachers with insight that may affect their own classroom practices. The researcher will present the steps of the present action research study along with the findings and analysis of that data. The teacher-researcher will recommend the use of e-readers in the classrooms of other teachers to aid in reading comprehension and improving motivation levels to complete assigned readings in these classes.

Based on the results of this study, the teacher-researcher's goal is to continue and encourage use of e-readers in ELA classrooms at WHS. This use will improve student reading comprehension and reading motivation levels. In order to achieve these changes, the teacher-researcher will present the information found in this study to other English teachers at WHS, as well as the administrative team, in order to encourage funding for moving toward the greater availability of e-readers for teacher and student use. This presentation will take place during an English Department meeting on April 25, 2017. The teacher-researcher will lead this plan for change, but it will require approval from administration for fund allocation. This is something that has already been considered by most administrative teams as the move to e-books has gained popularity. Estimates have indicated that digital textbooks will be the dominant format inside of 7 years, with revenue exceeding \$1.5 billion within 5 years (Reynolds, 2011).

The teacher-researcher will continue to monitor and record results in her own classroom while asking other teachers to note and share any changes they may notice in the reading comprehension scores and/or reading motivation levels of their own students,

regardless of their identified reading ability (especially beginning during the 2017-2018 school year). The researcher will analyze this data for differences just as the data was analyzed in this present study.

This action plan will begin immediately and carry on through the next 2 school years (June 2019). As the required curriculum for 11th graders in SC should not change in the next 2 years, *The Great Gatsby* will remain as a required text at this level. The teacher-researcher will plan to continue this research, in the same methods and possibly exploring other possible factors of effectiveness, over the next 2 years. In the upcoming school year (2017-2018), WHS will be transitioning to a 4x4 block schedule. Because of this, the teacher-researcher will have the opportunity to teach this novel twice per school year (October 2017 & 2018 and March 2018 & 2019), instead of the one time that has occurred in the past. This change will allow more flexibility for the researcher to change focus and criteria of the studies (considering aspects such as gender, socioeconomic status, family status, etc., as described in suggestions for further research) while using e-readers and print books.

Also beginning in the upcoming school year (2017-2018), the school district will be issuing a Chromebook to each high school student. Several textbooks will be issued via flash drive or available on online for use with these Chromebooks. This change will help widen the scope of the current Action Research study in the way that it can potentially now involve classroom instruction in subjects other than ELA. This will also give the teacher-researcher, and ultimately the school district, a greater picture of how reading from an electronic device or e-book can affect students' reading motivation and reading comprehension levels.

To accomplish this continued research, the researcher will need technical support and funds to ensure the continued operation of the current e-readers possessed by the library media center at WHS, as well as the possible purchase of new ones. Administration could approve funds for use for this or funds could exist in an account owned by the library media center. Another option could include grant writing by the teacher-researcher.

Facilitating Educational Change

The goals of this present action research study and action plan were to improve the reading comprehension levels and reading motivation levels in low-ability students at WHS, now and moving forward. With future research that is planned based on the action plan, the key questions mentioned in this chapter will be better addressed, helping students and teachers in better instruction and learning.

No change is without challenges. To continue with educational change in this area, challenges faced could include lack of student participation by way of student absenteeism and/or tardiness, teacher reluctance (other than the current teacher-researcher) to implement the use of e-readers in their classrooms and to take part in collecting data based on that implementation, as well as lack of funding for the maintenance and purchase of e-readers. To address these challenges, the teacher-researcher will take the lead on instruction for teachers regarding use of e-readers and their features. The teacher-researcher will also address the funding issue through cooperation with the library media specialists, administration, and/or possible grant applications.

Summary of Research Findings

Discussion of Major Points of the Study

The primary purpose of the present action research was to describe two classes of low-ability, rural, southern secondary ELA students at West High School who experienced reading *The Great Gatsby* in two different textual forms (i.e., e-books and traditional print books) and how these methods of accessing the text affected their reading comprehension and reading motivation levels.

Implications of the Findings

Based on the results of the action research study, students who read *The Great Gatsby* using e-readers had higher reading comprehension scores and showed increases in their reading motivation, but these differences were minimal, not statistically significant, and cannot be attributed to the study. According to the data analysis, the researcher concluded that e-readers benefitted 11th grade students of average or below average reading levels at West High School, even if only slightly. E-readers increased students' motivation to complete the reading of their required texts. This slight increase in reading motivation levels may account for the small difference in average reading comprehension scores, which were slightly higher in the E-reader group. Because they actually completed the reading, those student-participants gained a better comprehension of the text. This may be attributed to the extra features of e-readers, including online dictionaries and pronunciation tools. E-readers present the text one page at a time, rather than students receiving the entire book at once; this presentation may affect students' self-efficacy levels. Students reported that traditional print books can feel daunting or too

difficult to tackle as compared to the presentation of one page or screen at a time with e-readers.

Theoretical Implications

The results of this study align with the theoretical basis of schema theory of reading comprehension. Rumelhart (1982) explained schema as building blocks. Schema theory insists that general knowledge and concept understanding are key in reading comprehension, stating that most reading difficulties can be traced to insufficient prior knowledge (Anderson, Pearson, & Bolt, 1984). The results of this action research study suggest that reading comprehension is based on such schema and prior knowledge more than it is affected by the format of delivery.

These results also defend the earlier ideas presented by transactional theory, which concludes that each reader reacts and relates to a text based on his or her own personal experiences (Rosenblatt, 1995). With no significant difference discovered in reading comprehension levels between the Print group and the E-reader group, the results of this study support transactional theory.

The theoretical framework for this study's motivational research component was based on Bandura's (1997) social cognitive theory. This theory discusses the ideas regarding self-efficacy in the motivational level for tasks. As discussed in the literature, self-efficacy is the idea that an individual will perform successfully or poorly based on the belief they have in their own abilities. The present action research study did show a slight, though statistically insignificant, increase in self-efficacy and reading motivation levels. Because of this, the researcher concluded that the format of the text has no significant influence on reading motivation of these 11th graders.

Practical Implications

The results of the present action research study may lead to implications for educational practices in the teacher-researcher's classroom, as well as possibly department-, school-, and district-wide improvements. While responses differed for e-readers and print books, the results indicated no statistically significant relationship between reading comprehension or reading motivation and the format of book used. In an educational environment, teachers can use this information to support or reject the purchase and use of electronic readers in the classroom and beyond. If no significant improvement is caused by the use of e-readers, no move to convert texts to this format is necessary; however, researchers have described other numerous benefits to the use of e-books. E-books are described as being convenient, lightweight, environmentally friendly, portable, and easily stored (Clark et al., 2008). Conversely, if e-books become a more economical choice for classrooms and textbook adoption by schools, the results of the present action research study suggest no reason to stay with traditional print books for the sake of reading comprehension or reading motivation levels.

Limitations

The researcher made all efforts to limit the threats to accuracy in this action research study, however, limitations need to be recognized. The results of this study can only be generalized to the student participants, or possibly those like them at this specific high school. The lack of social and racial diversity in this sample made it impossible to generalize these results to groups that do not very closely match those of West High School.

During the course of the study, three students who began the original research plan left the study for various reasons: one transferred schools, one dropped out, and one was expelled. While the likelihood of these three participants changing the data drastically is unlikely, it would have been helpful to get their perspectives, as they were all enrolled in the Print group, which used the traditional print books and had a greater variety of responses toward print books as compared to e-books.

The Adolescent Motivations for School Reading (AMSR) could be considered a limitation as the student participants reported those themselves. The teacher-researcher assumed that the given answers would be truthful and accurate. Based on the possibility of human error, however, the researcher considered that external sources could have influenced the student participants and their responses on any given day the survey was proctored.

Moving forward, the teacher-researcher will implement the use of e-readers into the classroom, when possible. While neither reading comprehension levels nor reading motivation levels differ significantly, the majority of the student-participants seemed more excited and willing to take part in reading when presented with the e-reader option. As a classroom teacher constantly looking for a way to convince these students to read the required texts, the teacher-researcher will use whatever interest e-readers may create if it will help students to complete assigned readings and better comprehend texts.

Suggestions for Future Research

In this action research study, the researcher will present several ideas for future research on this topic. One area of study could include grade level differences in student-participants. Researchers could determine whether reading comprehension or reading

motivation levels are increased in elementary, middle school, or high school students. Through further inquiry, scholars may determine if a difference exists according to grade level and, if so, at what grade level this difference can be identified.

Another area of possible study is the simple matter of preference. Based on student interview responses, some students do not care for e-books and are opposed to using them more often in completing their required reading. More research could be done to determine if it is equally or more beneficial to allow these students to use traditional print books instead of transferring all reading to electronic means.

More research should also be completed on the use of the features included in e-books and how these may or may not improve the reading comprehension of these students, as many students from the E-reader group reported the features as helpful. Researchers could explore more specifically the tools used such as dictionaries or pronunciation tools. An extension of current research could include research questions regarding the use of these features. Lastly, researchers could replicate this study in an area with more socioeconomic and racial diversity, as well as ability level differences, to see if these results are able to be generalized to other groups of students, as the student-participants in this action research study greatly lack such diversity.

Conclusion

The primary purpose of the present action research was to compare and contrast the reading comprehension and motivation levels of low-ability, rural, southern secondary ELA students at West High School who experienced reading *The Great Gatsby* in two different textual forms (i.e., e-books and traditional print books). Based on the results of the action research study, students who read *The Great Gatsby* using e-

readers had higher average reading comprehension scores and showed increases in their reading motivation level; however, none of these increases proved to be statistically significant. According to the data analysis, e-readers added no statistically significant benefit to 11th grade students of average or below average reading levels at West High School.

REFERENCES

- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation process. *Journal of Educational Psychology*, 80, 260-267.
- An, S. (2013). Schema theory in reading. *Theory and Practice in Language Skills*, 3(1), 130-134.
- Anderson, R. C., Pearson, P., & Bolt, B. A. (1984). *A schema-theoretic view of basic processes in reading comprehension*. Technical Report No. 306.
- Baker, L., & Wigfield, A. (1999). Dimensions of children's reading motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34, 452-477.
- Balajthy, E. (2007). Technology and current reading/literacy assessment strategies. *The Reading Teacher*, 61(3), 240-247.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bergoray, D., Higgins, J., Harrison, J., & Collins-Emery, A. (2013). Adolescent reading/viewing of advertisements: Understandings from transactional and positioning theory. *Journal of Adolescent & Adult Literacy*, 57(2), 121-130.
- Butler, D. (2009). The textbook of the future. *Nature*, 458(2), 568-570.
- Chesser, W.D. (2011). Chapter 5: The E-textbook revolution. *Library Technology Reports*, 47(8), 28-40.
- Clark, D. T., Goodwin, S. P., Samuelson, T., & Coker, C. (2008). A qualitative assessment of the Kindle e-book reader: Results from initial focus groups. *Performance Measurement and Metrics*, 9(2), 118-129.
- Coddington, C. S., & Guthrie, J. T. (2009). Teacher and student perceptions of boys' and girls' reading motivation. *Reading Psychology*, 30, 225-249.
- Crestani, F., Landoni, M., & Melucci, M. (2005). Appearance and functionality of electronic books. *International Journal on Digital Libraries*, 6(2), 192-209.
- Creswell, J. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson.

- Eccles, J. (1983). Expectancies, values and academic behaviors. In J.T. Spence (Ed.), *Achievement and achievement motives* (p. 75-146). San Francisco, CA: Freeman.
- Fisher, D., Lapp, D., & Wood, K. (2011). Reading for details online and printed text: A prerequisite for deep reading. *Middle School Journal*, 42(3), 58-63.
- Ford, M. E. (1992). *Motivating humans*. Newbury Park, CA: Sage.
- Fulmer, S. M., & Fritjers, J. C. (2011). Motivation during excessively challenging reading task: The buffering role of relative topic interest. *The Journal of Experimental Education*, 79.
- Gambrell, L., Palmer, B., Codling, R., & Mazzoni, S. (1993). Assessing motivation to read. *The Reading Teacher*, 49(7), 518-533.
- Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6(1), 126-135.
- Grudzien, P., & Casey, A. M. (2008). Do off-campus students use e-books? *Journal of Library Administration*, 48(3/4), 455-466.
- Guthrie, J. T., & Wigfield, A. (1997). Reading engagement: A rationale for theory and teaching. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (p. 1-12). Newark, DE: International Reading Association.
- International Digital Publishing Forum. (2011). *Industry statistics*. Retrieved from <http://idpf.org/about-us/industry-statistics>.
- Jones, T., & Brown, C. (2011). Reading engagement: A comparison between ebooks and traditional print books in an elementary classroom. *International Journal of Instruction*, 4(2), 5-22.
- Knutson, R., & Fowler, G. A. (2009, July 20). *Book smarts? E-texts receive mixed reviews from students*. Retrieved from <http://online.wsj.com/article/SB1000142052970203457427704175008493>
- Korat, O., & Shamir, A. (2007). Electronic books versus adult readers: Effects on children's emergent literacy as a function of social class. *Journal of Computer Assisted Learning*, 23, 248-259.
- Korat, O., Segal-Drori, O., & Klein, P. (2009). Electronic and printed books with and without adult support as sustaining emergent literacy. *Journal of Educational Computing Research*, 41(4), 453-475.

- Larson, L. C. (2009). Digital literacies. *Journal of Adolescent & Adult Literacy*, 53(3), 255-258.
- Larson, L. C. (2010). Digital readers: The next chapter in e-book reading and response. *Reading Teacher*, 64(1), 15-22.
- Little, D. C., & Box, J. (2011). The use of specific schema theory strategy-semantic-mapping-to facilitate vocabulary development and comprehension for at-risk readers. *Reading Improvement*, 48(1), 24-31.
- Mertler, C. A. (2014). *Action research: Improving schools and empowering educators*. Thousand Oaks, CA: Sage.
- Miller, C.C., & Bosman, J. (2011, May 19). E-books outsell print books Amazon. *New York Times*. Retrieved from <http://www.nytimes.com/2011/05/20/technology/20amazon.html>.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543-578.
- Pardo, L. S. (2004). What every teacher needs to know about comprehension. *The Reading Teacher*, 85(3), 272-280.
- Pitcher, S., Albright, L., DeLaney, C., Walker, N., Seunarinisingh, K., Mogge, S.,...& Dunston, P. (2007). Assessing adolescents' motivation to read. *Journal of Adolescent & Adult Literacy*, 50(5), 378-396.
- Polanka, S. (2011). *University of Washington Kindle study: Results in*. Retrieved from http://www.libraries.wright.edu/noshelfrequired/2011/05/04/university-of-washington_kindle-study-results-in/.
- Pressley, M. (2003). *Time to revolt against reading instruction as usual: What comprehension instruction could and should be*. Presentation at the annual meeting of the Michigan Reading Association, Grand Rapids, MI.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. Santa Monica, CA: Office of Education Research and Improvement.
- Reynolds, R. (2011, March). *Digital textbooks reaching the tipping point in U.S. higher education: a revised five-year forecast*. Retrieved from http://info.xplana.com/report/pdf/Xplana_Whitepaper_2011.pdf
- Rosenblatt, L. (1978). *The reader, the text and the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.

- Rosenblatt, L. (1995). The transactional theory: Against dualisms. *College English*, 55(4), 377-386.
- Rumelhart, D. E. (1982). Schemata: The building blocks of cognition. In J. Guthrie (Ed.), *Comprehension and Teaching: Research Reviews* (pp. 3-26). Newark, NJ: International Reading Association.
- Smith, S. D., & Caruso, J. B. (2010, October). *The ECAR study of undergraduate students and information technology, 2010*. Retrieved from <http://net.educause.edu/ir/library/pdf/EKF/EKF1006.pdf>
- Spiro, R. (1977). Remembering information from text: The "state of schema" approach. In R. Anderson & W. Montague (Eds.), *Schooling and the Acquisition of Knowledge*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Tees, T. (2010). Ereaders in academic libraries: A literature review. *Australian Library Journal*, 59(4), 180-186.
- Tracey, D. H., & Morrow, L. M. (2002). Preparing young learners for successful reading comprehension: In C C. Block & M. Pressley (Eds.), *Comprehension Instruction: Research-Based Best Practices* (pp. 319-333). New York, NY: Guilford.
- U. S. Census Bureau. (2013). *State and county quick facts*. Retrieved from <http://quickfacts.census.gov/qfd/states/45/45083.html>
- Williams, M. G., & Dittmer, A. (2009). Textbooks on tap: Using electronic books housed in handheld devices in nursing clinical courses. *Nursing Education Perspectives*, 30(4), 220-225.
- Woody, W. D., Daniel, D. B., & Baker, C.A. (2010). E-books or textbooks: Students prefer textbooks. *Computers & Education*, 55, 945-948.
- Young, J. R. (2010). *To save money, colleges may force a switch to e-textbooks*. Retrieved from <http://chronicle.com/article/The-End-of-the-Textbook-as-We/125044/>
- Zucker, T. A., Moody, A. K., & McKenna, M. C. (2009). The effects of electronic books on pre-kindergarten-to-grade 5 students' literacy and language outcomes: A research synthesis. *Journal of Educational Computing Research*, 40(1), 47-87.

APPENDIX A: PARENTAL CONSENT FORM

Parental Consent for Classroom Research

Dear Parent or Guardian,

My name is Graham Parker. I am a doctoral candidate in the Curriculum and Instruction Department at the University of South Carolina. I am conducting a research study as part of the requirements of my degree in Curriculum and Instruction, and I would like to invite your student to participate.

I am studying student motivation to read and reading comprehension as affected by the use of electronic reading devices in high school students. If you decide to allow your student to participate, he/she will be asked to complete a pre and post survey on his/her motivation regarding reading and read a novel using either an electronic reading device (e-book) or a traditional print novel. All meetings will take place at school in your student's American Literature class over a period of 2 weeks.

Participation is confidential. The results of the study may be published or presented at professional meetings, but your student's identity will not be revealed.

Taking part in the study is your decision. You do not have to allow your student to be part of this study if you do not want to. You may also quit being in the study at any time or decide not to answer any question you are not comfortable answering.

I will be happy to answer any questions you have about the study. You may contact me at 864-710-5790 or gp3@email.sc.edu or my faculty advisor, (Kenneth Vogler, 803-777-3094, or kvogler@mailbox.sc.edu) if you have study related questions or problems. If you have any questions about your rights as a research participant, you may contact the Office of Research Compliance at the University of South Carolina at 803-777-7095.

Thank you for your consideration If you would like to participate, you do not need to take any action. However, if you do not want your student to participate then you can make note on the bottom of this letter and send it back to school, call me to let me know, or email me to let me know. If I do not hear from you by September 23rd (one week before research begins) then I will gratefully assume that you are allowing your student to participate in the study.

With kind regards,
Graham Parker

APPENDIX B: STUDENT PARTICIPANT ASSENT FORM

I am a researcher from the University of South Carolina. I am working on a study about student motivation to read/reading comprehension and I would like your help. I am interested in learning more about student motivation to read. Your parent/guardian has already said it is okay for you to be in the study, but it is up to you.

If you want to be in the study, you will be asked to do the following:

- Answer some written questions about your motivation to read. This will take about 10 minutes each time you answer questions, which you will be asked to do 2 times.
- Read a novel in your American Literature class and complete a reading comprehension test based on that novel.

Any information you share with us will be private. No one except me will know what your answers to the questions will.

You don't have to help with this study. Being in the study isn't related to your regular class work and won't help or hurt your grades. You can also drop out of the study at any time, for any reason, and you won't be in any trouble and no one will be mad at you.

Please ask any questions you would like to.

Signing your name below means you have read the information about the study, that any questions you may have had have been answered, and you have decided to be in the study. You can still stop being in the study any time you want to.

Printed Name of Minor

Age

Signature of Minor

Date

**APPENDIX C: PERMISSION TO COMPLETE RESEARCH AT SCHOOL
LEVEL**

From: Kurt Kreuzberger
Sent: Friday, January 29, 2016 10:17 AM
To: Graham Parker
Subject: RE: request for research approval

Graham,
You have permission to conduct your research at XXXXXX High School.

Kurt Kreuzberger

From: Graham Parker
Sent: Friday, January 29, 2016 9:27 AM
To: Kurt Kreuzberger
Subject: request for research approval

LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

University of South Carolina
901 Sumter Street, Suite 301
Columbia, SC 29208

XXXXXX High School
130 Warrior Lane
Westminster, SC 29693

January 29, 2016

Dear Mr. Kreuzberger:

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Ed. D student in the Department of Education at the University of South Carolina. My supervisor is Dr. Kenneth Vogler.

The proposed topic of my research is: The Relationship Between Literacy and Reading Motivation: Using E-readers in the Secondary Classroom. The rationale for the study is the belief that students will be more motivated to read and reading comprehension will increase with the use of electronic readers, as opposed to traditional print novels.

I am hereby seeking your consent to analyze student achievement and student attitude towards the use of electronic readers and traditional print novels.

Should you require any further information, please do not hesitate to contact me. My contact information is as follows: gparker@oconee.k12.sc.us or 864-710-5790.

Upon completion of the study, I undertake to provide you with a bound copy of the dissertation.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Graham Parker

**APPENDIX D: PERMISSION TO COMPLETE RESEARCH AT DISTRICT
LEVEL**

From: Gregg R. Bibb
Sent: Wednesday, February 03, 2016 12:44 PM
To: Graham Parker
Subject: RE: Permission Request for Research

XXXX School District gives you permission to proceed with your study.

From: Graham Parker
Sent: Monday, February 01, 2016 9:44 AM
To: Gregg R. Bibb
Subject: Permission Request for Research

LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

University of South Carolina
901 Sumter Street, Suite 301
Columbia, SC 29208

XXXXXXX High School
130 Warrior Lane
Westminster, SC 29693

February 1, 2016

Dear Dr. Bibb:

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Ed. D student in the Department of Education at the University of South Carolina. My supervisor is Dr. Kenneth Vogler.

The proposed topic of my research is: The Relationship Between Literacy and Reading Motivation: Using E-readers in the Secondary Classroom. The rationale for the study is the belief that students will be more motivated to read and reading comprehension will increase with the use of electronic readers, as opposed to traditional print novels.

I am hereby seeking your consent to analyze student achievement and student attitude towards the use of electronic readers and traditional print novels.

Should you require any further information, please do not hesitate to contact me. My contact information is as follows: gparker@oconee.k12.sc.us or 864-710-5790.

Upon completion of the study, I undertake to provide you with a bound copy of the dissertation.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Graham Parker

APPENDIX E: ADOLESCENT MOTIVATIONS FOR SCHOOL READING

(AMSR) QUESTIONNAIRE

Name: _____ Date: _____
Teacher: _____ Period: _____

School Reading Questionnaire

Please read the following statements and select the response that best fits how YOU feel about reading for your Language Arts/Reading class this school year.

When answering the questions think about anything you read for Language Arts/Reading class this school year. This could include any of the following materials: fiction books, non-fiction books, textbooks, magazines, newspapers, and Web sites.

For each question think about how similar the statement is to YOU and how YOU feel about reading for your Language Arts/Reading class this school year. Decide whether the statement is: a lot like you, somewhat like you, not like you, or not at all like you.

Sample Questions

1. I enjoy playing sports for school.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

2. I believe Language Arts/Reading class is important for my future.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

Remember to answer the questions honestly based on your own experiences. There are no right or wrong answers. Your teachers, parents and friends will not see your answers.

Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.

Not for use other than research purposes.

1. I enjoy the challenge of reading for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

2. I share my opinion about what I read for Language Arts/Reading class with my classmates.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

3. I choose to do other things besides read for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

4. I can figure out difficult words in reading materials for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

5. I make fun of my classmates' opinions about what they read for Language Arts/Reading class.

- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
6. I believe I am a good reader for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
7. I enjoy finding new things to read for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
8. I respect my classmates' opinions about what they read in Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
- Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.
Not for use other than research purposes.
9. I read as little as possible for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
10. I feel successful when I read for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
11. I am good at reading for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
12. I enjoy it when reading materials for Language Arts/Reading make me think.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
13. I enjoy reading for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
14. I choose easy books to read for Language Arts/Reading class so I don't have to work hard.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
15. Reading for Language Arts/Reading class is boring to me.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
16. I try to convince my classmates that the reading for Language Arts/Reading class is a waste of time.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
- Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.
Not for use other than research purposes.
17. I skip words when reading for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
18. I respect other students' comments about what they read in Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
19. I have a hard time recognizing words in books for Language Arts/Reading class.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
20. I share what I learn from reading for Language Arts/Reading class with my classmates.
- | | | | | |
|--|------------|---------|----------|---------|
| | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
21. I show interest in what my classmates read for Language Arts/Reading class.
- | | | | | |
|--|------------|-----|----------|-------|
| | Not At All | Not | Somewhat | A Lot |
|--|------------|-----|----------|-------|

- | | | | | |
|--|------------|---------|----------|---------|
| | Like Me | Like Me | Like Me | Like Me |
| 22. Reading materials for Language Arts/Reading class are difficult to read. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 23. Reading for Language Arts/Reading class is usually difficult. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 24. Reading for Language Arts/Reading class is difficult for me. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
- Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.
Not for use other than research purposes.
- | | | | | |
|---|------------|---------|----------|---------|
| 25. It is hard for me to understand reading materials for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 26. I keep what I learn from reading for Language Arts/Reading class to myself. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 27. I enjoy reading in my free time for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 28. I think I am a good reader for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 29. I make fun of other students' comments about what they read in Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 30. I think reading for Language Arts/Reading class is hard. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 31. I offer to help my classmates with reading for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 32. Reading for Language Arts/Reading class is a waste of time. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
- Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.
Not for use other than research purposes.
- | | | | | |
|--|------------|---------|----------|---------|
| 33. I leave my classmates alone when they have problems reading for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 34. I am good at remembering words I read for Language Arts/Reading class | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 35. I recognize words easily when I read for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 36. I make lots of mistakes reading for Language Arts/Reading class. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |
| 37. I keep my opinion about what I read for Language Arts/Reading class to myself. | Not At All | Not | Somewhat | A Lot |
| | Like Me | Like Me | Like Me | Like Me |

38. I am uninterested in what other students read for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

39. I avoid reading for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

40. I try to cheer my classmates up if they have problems with reading in Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.

Not for use other than research purposes.

41. I like to read for Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

42. I think I can read the books in Language Arts/Reading class.

Not At All	Not	Somewhat	A Lot
Like Me	Like Me	Like Me	Like Me

Copyright© 2009 by Cassandra S. Coddington and John T. Guthrie, University of Maryland.

Not for use other than research purposes.

APPENDIX F: READING COMPREHENSION TEST—THE GREAT GATSBY

The Great Gatsby Test

Who said it?

Using the list of characters provided, name the character who stated the following quotes:

Jordan Baker	Jay Gatsby
Daisy Buchanan	George Wilson
Tom Buchanan	Myrtle Wilson
Nick Caraway	Meyer Wolfshiem

1. "Can't repeat the past? Why of course you can!."
2. "I'm thirty. I'm five years too old to lie to myself and call it honor."
3. "Do you always watch for the longest day of the year then miss it? I always watch for the longest day of the year and then miss it."
4. "I hate careless people." Even in kidding."
5. "I hate that word *hulking*. Even in kidding"
6. "You can't live forever"
7. "Finest specimens of human molars."
8. "The God Damn coward. He didn't even stop his car."

Questions

Write the answer of questions listed below.

9. By what name does Gatsby call Nick?
10. What kind of drinks do Gatsby, Jordan, Tom, and Daisy have at the hotel?
11. What city did Nick come from when he moved to West Egg?
12. Who was Nick's "date" the night that he was with Tom in New York?
13. Jordan Baker is a professional player in what sport?
14. What was Tom and Daisy's daughter's name?
15. Where did Gatsby originally say he was from?

True and False

Write true or false next to the statements below.

16. Tom is very concerned about hiding his affair with Myrtle.
17. After the war, Gatsby made his money off the stock market.
18. Meyer Wolfsheim's cuff links were made of human molars
19. Jay Gatsby died from drowning in his pool.

20. Nick was in the Ninth Machine-Gun Battalion in the war.

Multiple Choice

Answer the questions

21. Who is Meyer Wolfsheim?

- a): a wealthy man who gained his fortune from the gold rush
- b): a Greek man and neighbor of Wilson who consoles him after Myrtle is killed
- c): a poor man content in his existence until he suspects that his wife is having an affair
- d): a notorious underworld figure involved in organized crime

22. Who narrates the Great Gatsby?

- a): Jay Gatsby
- b): Nick Carraway
- c): Tom Buchanan
- d): George Wilson

23. Who is Ewing Klipspringer?

- a): a boarder who lives in Gatsby's house
- b): the brother of Myrtle Wilson who lives in New York City
- c): a guest at Gatsby's parties who wrecks his car there
- d): a longtime friend of Daisy

24. Which of these things is NOT symbolized by the green light?

- (a): The American Dream
- (b): Optimism
- (c): Money
- (d): Nature

25. Who is Dr. Eckleburg?

- (a): Gatsby's doctor and professional associate
- (b): Tom Buchanan's spy and confidante
- (c): an eye doctor whose billboard overlooks the road to West Egg
- (d): a guest at Gatsby's party

26. Myrtle Wilson is

- (a): Daisy's friend and a golf pro.
- (b): Nick's girlfriend.
- (c): Tom's lover.
- (d): the plumber's wife.

27. Why does Tom break Myrtle's nose?

- (a): He finds out she's having an affair with another man
- (b): She says Daisy's name
- (c): Tom tries to punch Nick and misses
- (d): None of these

28. What reason does Myrtle give for having an affair?

- (a): "Do what you can to be happy."
- (b): "The Jazz Age is a time of irresponsibility and gaiety."
- (c): "My husband, Tom, beats me. He broke my nose."
- (d): "You can't live forever."

29. Jay Gatsby is definitely
- (a): a German spy.
 - (b): a murderer.
 - (c): a bootlegger.
 - (d): a long-time member of East Egg's elite.
30. Which of these details is true about Gatsby's past?
- (a): He received a degree from Oxford .
 - (b): He is the son of wealthy people from the Midwest.
 - (c): He fought in the war.
 - (d): All of these are false
31. The road between West Egg and East egg is
- (a): a literary illusion to the mythological River Styx.
 - (b): a "valley of ashes".
 - (c): a literary illusion to the Waste Land, by T.S. Eliot.
 - (d): All of these
32. Meyer Wolfsheim's cufflinks are made from
- (a): egyptian gold.
 - (b): obsidian.
 - (c): human molars.
 - (d): elephant tusk.
33. Why does Gatsby throw extravagant parties?
- (a): He wants to live a lavish life.
 - (b): He hopes to make many friends.
 - (c): He believes that Daisy may come to a party some night.
 - (d): It diverts some attention away from his notorious crime-laden life.
34. Why does Nick think that Gatsby may be disappointed with Daisy?
- (a): She married Tom instead of marrying Gatsby because Tom had more money.
 - (b): Daisy could not possibly live up to the dreams that Gatsby had about her.
 - (c): She does not really love Gatsby anymore.
 - (d): She is unimpressed by the picture of Dan Cody and Gatsby on the yacht.
35. When Gatsby and Daisy meet in Nick's home, Gatsby almost breaks Nick's
- (a): porcelain statuette.
 - (b): clock.
 - (c): bust of Apollo.
 - (d): window.
36. When did James Gatz change his name to Gatsby?
- (a): age 17
 - (b): age 27
 - (c): age 24
 - (d): age 15
37. How is the true story of Gatsby's life revealed?
- (a): Daisy pressures him into confiding it to Nick. She needs advice about Gatsby and wants Nick to know the whole story.
 - (b): Nick finds papers in Gatsby's study, then asks Gatsby to explain. At first,

- Gatsby is angry about the accusation of being a liar, but then confides all.
- (c): A reporter comes to Gatsby's home and interviews him. Thereafter, the rumors about Gatsby's past are compared by the narrator to the true events of Gatsby's life.
- (d): Gatsby breaks down when he sees Daisy. She asks him point-blank to explain his situation to Tom and he does.
38. Who changed Gatsby's life forever, inspiring him that he could become rich and powerful someday?
- (a): Daisy
- (b): Nick
- (c): Dan Cody
- (d): Meyer Wolfsheim
39. Why does Gatsby stop throwing parties?
- (a): He's been reunited with Daisy; that was the whole reason he threw the parties in the first place.
- (b): He's running out of money, and he needs to retain some now that he and Daisy want to get married.
- (c): He's tired of being leeches from; he'd rather spend the money on Daisy.
- (d): He doesn't want the gossip about him to swell.
40. Who kills Myrtle?
- (a): Daisy
- (b): Tom
- (c): Gatsby
- (d): George Wilson
41. Why does Gatsby allow Daisy to drive his car?
- (a): She wants to murder Myrtle Wilson, her husband's mistress.
- (b): She wants to calm her nerves after a tense lunch.
- (c): Gatsby sees a symbolic sexuality in allowing Daisy to "command his vehicle."
- (d): None of these
42. Why doesn't Gatsby leave West Egg after Nick tells him that the authorities know that his car killed Myrtle?
- (a): He wants to go to jail; perhaps Daisy will love him more if he gives up everything for her.
- (b): He wants to protect Daisy and see what she will do.
- (c): He thinks he has enough power to pay off the police if he faces any criminal action.
- (d): He recognizes the class differences between the Wilson's and himself and thinks they would be powerless in a court of law.
43. Why does Nick say, "You're worth the whole damn bunch put together"?
- (a): He recognizes Gatsby's immense wealth and points out that he is worth more money than all the others combined.
- (b): He admires Gatsby's vast bravery, honor, and above all optimism and faith in the American Dream.

- (c): He's trying to make Gatsby feel better since he is about to go to jail.
(d): He's being sarcastic; really he thinks Gatsby is a low-life crook who deserves time behind bars.
44. Who symbolizes God in this story?
(a): a billboard
(b): Gatsby
(c): Nick
(d): Wilson
45. Who does not attend Gatsby's funeral?
(a): Owl-Eyes
(b): Nick
(c): Meyer Wolfsheim
(d): All of these men attended Gatsby's funeral.
46. How does George know that Myrtle is having an affair?
(a): he sees her getting in the car
(b): he finds a dog collar
(c): he doesn't suspect anything
(d): he asked her and she didn't deny it well
47. How does Gatsby prepare Nick's house for Daisy's arrival?
(a): He sends someone to mow the lawn
(b): He sends flowers (for decoration)
(c): All of the above
(d): None of the above
48. What college does James Gatz attend? (Not his alias Gatsby)
(a): Duke
(b): Yale
(c): St. Olaf
(d): He didn't go to college in the U.S. (he studied in Europe right before the war).
49. What does Gatsby show Daisy that makes her cry?
(a): Shirts imported from England
(b): His collection of newspaper clippings that he kept about her
(c): How well Klipspringer can play "their" song from so many years ago
(d): His picture with Dan Cody
50. What is Nick's real job?
(a): He came to New York to become a bootlegger.
(b): He's a bondman.
(c): He's an aspiring lawyer.
(d): He plays golf with Jordan.

APPENDIX G: MOTIVATION SURVEY RESPONSES FOR PRINT GROUP

Construct & Related Questions	Mean Response (Pre-reading)	Mean Response (Post-Reading)	Difference
<i>Intrinsic Motivation</i>			
1. I enjoy the challenge of reading for Language Arts/Reading class.	2.18	2.0	-0.18
7. I enjoy finding new things to read for Language Arts/Reading class.	1.79	2.29	+.05
10. I feel successful when I read for Language Arts/Reading class.	2.66	2.76	+0.1
12. I enjoy it when reading materials for Language Arts/Reading class make me think.	2.48	2.29	-0.19
13. I enjoy reading for Language Arts/Reading class.	2.22	2.11	-0.11
15. Reading for Language Arts/Reading class is boring to me.	3.26	3.12	-0.14
27. I enjoy reading in my free time for Language Arts/Reading class.	1.87	1.71	-0.16
32. Reading for Language Arts/Reading class is a waste of time.	2.4	2.59	+0.19
41. I like to read for Language Arts/Reading class.	1.48	1.88	+0.4
Average Response for Intrinsic Motivation Questions	2.36	2.31	-0.05
<i>Avoidance</i>			
3. I choose to do other things besides read for Language Arts/Reading class.	3.13	2.76	-0.37
9. I read as little as possible for Language Arts/Reading class.	3.22	3	-0.22
14. I choose easy books to read for Language Arts/Reading class so I don't have to work hard.	3.05	3.24	+0.19
17. I skip words when reading for Language Arts/Reading class.	2.53	2.53	+/-0
39. I avoid reading for Language Arts/Reading class.	2.87	2.88	-0.01
Average Response for Avoidance Questions	2.96	2.88	-0.08
<i>Self-Efficacy</i>			
4. I can figure out difficult words in reading materials for Language Arts/Reading class.	2.70	2.88	+0.18
6. I believe I am a good reader for Language Arts/Reading class.	2.57	2.71	+0.14

11. I am good at reading for Language Arts/Reading class.	2.61	2.82	+0.21
28. I think I am a good reading for Language Arts/Reading class.	2.53	2.65	+0.12
34. I am good at remembering words I read for Language Arts/Reading class.	2.44	2.47	+0.03
35. I recognize words easily when I read for Language Arts/Reading class.	2.35	2.76	+0.41
42. I think I can read the books in Language Arts/Reading class.	2.57	2.94	+0.37
Average Response for Self-Efficacy Questions	2.54	2.75	+0.21

Perceived Difficulty

19. I have a hard time recognizing words in books for Language Arts/Reading class.	2.22	2.53	+0.31
22. Reading materials for Language Arts/Reading class are difficult to read.	2.57	2.35	-0.22
23. Reading for Language Arts/Reading class is usually difficult.	2.57	2.24	-0.33
24. Reading for Language Arts/Reading class is difficult for me.	2.57	2.24	-0.33
25. It is hard for me to understand reading materials for Language Arts/Reading class.	2.44	2.71	+0.27
30. I think reading for Language Arts/Reading class is hard.	2.74	2.41	-0.33
36. I make lots of mistakes reading for Language Arts/Reading class.	3.05	2.71	-0.31
Average Response for Perceived Difficulty Questions	2.6	2.46	-0.14

Prosocial Interactions

2. I share my opinion about what I read for Language Arts/Reading class with my classmates.	2.36	2.18	-0.18
20. I share what I learn from reading for Language Arts/Reading class with my classmates.	2.87	2.0	-0.87
21. I show interest in what my classmates read for Language Arts/Reading class.	2.44	2.41	-0.03
26. I keep what I learn from reading for Language Arts/Reading class to myself.	3.00	3.18	+0.18
31. I offer to help my classmates with reading for Language Arts/Reading class.	2.26	2.41	+0.15
33. I leave my classmates alone when they have problems reading for Language Arts/Reading class.	2.53	2.47	-0.06
37. I keep my opinion about what I read for Language Arts/Reading class to myself.	3.22	3.0	-0.22
38. I am uninterested in what other students read for Language Arts/Reading class.	2.44	3.65	+1.21
40. I try to cheer up my classmates if they have problems with reading in Language Arts/Reading class.	2.66	2.82	+0.16
Average Response for Prosocial Interactions Questions	2.65	2.68	+0.03

Antisocial Interactions

5. I make fun of my classmates' opinions about what they read for Language Arts/Reading class.	1.70	1.53	-0.17
8. I respect my classmates' opinions about what they read in Language Arts/Reading class.	3.48	3.24	-0.24
16. I try to convince my classmates that the reading for Language Arts/Reading class is a waste of time.	1.96	1.94	-0.02
18. I respect other students' comments about what they read in Language Arts/Reading class.	3.22	3.41	+0.19
29. I make fun of other students' comments about what they read in Language Arts/Reading class.	1.70	1.47	-0.23
Average Response for Antisocial Interactions Questions	2.42	2.32	-0.1

APPENDIX H: MOTIVATION SURVEY RESPONSES FOR E-READER GROUP

Construct & Related Questions	Mean Response (Pre-reading)	Mean Response (Post-Reading)	Difference
<i>Intrinsic Motivation</i>			
1. I enjoy the challenge of reading for Language Arts/Reading class.	2.75	2.75	+/-0
7. I enjoy finding new things to read for Language Arts/Reading class.	2.21	2.71	+0.5
10. I feel successful when I read for Language Arts/Reading class.	2.8	2.83	+0.03
12. I enjoy it when reading materials for Language Arts/Reading class make me think.	2.63	2.83	+0.2
13. I enjoy reading for Language Arts/Reading class.	2.5	3.0	+0.5
15. Reading for Language Arts/Reading class is boring to me.	2.84	2.63	-0.41
27. I enjoy reading in my free time for Language Arts/Reading class.	1.92	2.13	+0.21
32. Reading for Language Arts/Reading class is a waste of time.	2.13	2.13	+/-0
41. I like to read for Language Arts/Reading class.	2.42	2.54	+0.12
Average Response for Intrinsic Motivation Questions	2.47	2.62	+0.15
<i>Avoidance</i>			
3. I choose to do other things besides read for Language Arts/Reading class.	2.88	3.17	+0.29
9. I read as little as possible for Language Arts/Reading class.	2.75	2.46	-0.29
14. I choose easy books to read for Language Arts/Reading class so I don't have to work hard.	2.67	2.79	+0.12
17. I skip words when reading for Language Arts/Reading class.	2.42	2.46	+0.04
39. I avoid reading for Language Arts/Reading class.	2.34	2.38	+0.04
Average Response for Avoidance Questions	2.62	2.65	+0.03
<i>Self-Efficacy</i>			
4. I can figure out difficult words in reading materials for Language Arts/Reading class.	2.84	3.17	+0.33
6. I believe I am a good reader for Language Arts/Reading class.	3.17	3.29	+0.12

11. I am good at reading for Language Arts/Reading class.	3.05	3.17	+0.12
28. I think I am a good reading for Language Arts/Reading class.	3.13	3.33	+0.2
34. I am good at remembering words I read for Language Arts/Reading class.	2.96	3.75	+0.79
35. I recognize words easily when I read for Language Arts/Reading class.	2.92	3.13	+0.21
42. I think I can read the books in Language Arts/Reading class.	3.42	3.42	+/-0
Average Response for Self-Efficacy Questions	3.07	3.32	+0.25
<i>Perceived Difficulty</i>			
19. I have a hard time recognizing words in books for Language Arts/Reading class.	2.04	2.67	+0.63
22. Reading materials for Language Arts/Reading class are difficult to read.	1.96	2.21	+0.25
23. Reading for Language Arts/Reading class is usually difficult.	2.0	1.92	-0.08
24. Reading for Language Arts/Reading class is difficult for me.	2.0	1.88	-0.12
25. It is hard for me to understand reading materials for Language Arts/Reading class.	1.83	2.0	+0.17
30. I think reading for Language Arts/Reading class is hard.	1.88	2.0	+0.12
36. I make lots of mistakes reading for Language Arts/Reading class.	2.08	2.17	+0.09
Average Response for Perceived Difficulty Questions	1.97	2.12	+0.15
<i>Prosocial Interactions</i>			
2. I share my opinion about what I read for Language Arts/Reading class with my classmates.	2.46	2.58	+0.12
20. I share what I learn from reading for Language Arts/Reading class with my classmates.	2.21	2.33	+0.12
21. I show interest in what my classmates read for Language Arts/Reading class.	2.42	2.83	+0.41
26. I keep what I learn from reading for Language Arts/Reading class to myself.	2.71	2.75	+0.04
31. I offer to help my classmates with reading for Language Arts/Reading class.	2.42	2.71	+0.29
33. I leave my classmates alone when they have problems reading for Language Arts/Reading class.	2.54	2.5	-0.04
37. I keep my opinion about what I read for Language Arts/Reading class to myself.	2.96	2.71	-0.25
38. I am uninterested in what other students read for Language Arts/Reading class.	2.58	2.63	+0.05
40. I try to cheer up my classmates if they have problems with reading in Language Arts/Reading class.	2.67	2.92	+0.25
Average Response for Prosocial Interactions Questions	2.55	2.66	+0.11

<i>Antisocial Interactions</i>			
5. I make fun of my classmates' opinions about what they read for Language Arts/Reading class.	1.54	1.58	+0.04
8. I respect my classmates' opinions about what they read in Language Arts/Reading class.	3.33	3.5	+0.17
16. I try to convince my classmates that the reading for Language Arts/Reading class is a waste of time.	1.42	1.71	+0.29
18. I respect other students' comments about what they read in Language Arts/Reading class.	3.21	3.42	+0.21
29. I make fun of other students' comments about what they read in Language Arts/Reading class.	1.67	1.54	-0.13
Average Response for Antisocial Interactions Questions	2.23	2.35	+0.12

APPENDIX I: READING COMPREHENSION SCORES FOR PRINT GROUP

Participant Number	Test Score
1	55
2	48
4	59
5	49
6	55
7	74
8	55
9	77
10	64
11	37
12	47
14	55
15	51
16	67
17	60
18	44
19	51
20	51
21	49
23	49
Average score	55

APPENDIX J: READING COMPREHENSION SCORES FOR E-READER

GROUP

Participant Number	Test Score
24	62
26	55
27	55
28	66
29	77
30	80
31	42
32	64
33	72
34	47
35	81
36	64
37	91
38	70
39	70
40	79
41	76
42	84
43	94
44	69
45	46
46	55
47	52
48	75
Average score	68