The Effects of Reading Interest, Reading Purpose, and Reading Maturity on Reading Comprehension of High School Students

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Abstract

Despite assertions made by researchers that the 21st century places more pressure on acquiring skills for deeper levels of reading comprehension, most instructional programs for reading still focus mainly on lower-level skills such as speed-reading, memorizing, and summarizing (Murnane, Sawhill, & Snow, 2012). The present study was an investigation on how different reading behaviors correlated with reading comprehension. [The first factor in this study was reading maturity, or the level of skill with which a reader can extract meanings from texts and apply them to real life (Gray & Rogers, 1956). The second, reading purpose, referred to the reason behind engaging with written material through reading (Thomas, 2001). The third, reading interest, referred to the potential excitement a reader perceives when contemplating reading (in order to be able to learn new information) (Thomas, 2001). Data for the present study were gathered from existing reading comprehension test scores from the XYZ School District, as well as from administering the reading maturity survey developed by Thomas (2001). Scores on school examinations and the reading maturity survey were analyzed using descriptive statistics and correlation coefficients. This study found a positive significant relationship between reading comprehension and reading interest, between reading comprehension and reading purpose, as well as between reading comprehension and reading maturity. As each of these reading facets increases, the level of student reading comprehension increases. These reading facets are positive indicators of reading success or reading comprehension. They influence student reading comprehension in a positive manner.

iii

Dedication

This dissertation is dedicated to Stella Squires. May we always read, write, and play together.

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| Abstractiii |
|---------------------------------------|
| Dedicationiv |
| Acknowledgementsv |
| Chapter One: Introduction |
| Conceptual Framework and Background2 |
| The importance of reading maturity2 |
| Teaching critical reading |
| Statement of the Problem |
| Purpose Statement |
| Significance of the Study |
| Delimitations |
| Assumptions7 |
| Research Questions |
| Definition of Terms |
| Reading comprehension |
| Reading interest |
| Reading maturity9 |
| Reading purpose |
| Overview of Methods9 |
| Organization of the Study9 |
| Chapter Two: Review of the Literature |
| Reading Instruction |

Table of Contents

| Read | ding Trends | 19 |
|-------------|-----------------------------------|----|
| Face | ets of Reading | 24 |
| | Reading maturity | 24 |
| | Levels of reading maturity | 28 |
| | Types of reading maturity | 28 |
| | Reading purpose | 29 |
| | Reading interest | 32 |
| Effe | cts of Reading | 38 |
| Gaps | s in the Literature | 39 |
| Sum | ımary | 40 |
| Chapter Thr | ree: Methods | 41 |
| Rese | earch Design | 41 |
| Рори | ulation and Sample | 42 |
| Sam | pling Procedure | 42 |
| Instr | rumentation | 43 |
| | Measurement | 44 |
| | Reliability and Validity | 47 |
| Data | a Collection Procedures | 47 |
| | Informed Consent | 48 |
| | Confidentiality | 49 |
| Data | a Analysis and Hypothesis Testing | 49 |
| Limi | itations | 52 |
| Sum | ımary | 52 |

| Chapter Four: Results | 53 |
|---|----|
| Descriptive Statistics | 53 |
| Hypothesis Testing | 55 |
| Summary | 57 |
| Chapter Five: Interpretation and Recommendations | 59 |
| Study Summary | 59 |
| Overview of the Problem | 59 |
| Purpose Statement and Research Questions | 61 |
| Review of the Methodology | 66 |
| Major Findings | 67 |
| Findings Related to the Literature | 63 |
| Conclusions | 67 |
| Implications for Action | 66 |
| Recommendations for Future Research | 67 |
| Concluding Remarks | 68 |
| References | 69 |
| Appendices | 76 |
| Appendix A. IRB Request | 77 |
| Appendix B. Approval | 82 |
| Appendix C. Reading Maturity Survey | 85 |
| Appendix D. Missouri Assessment Program EOC Released Item | 88 |

List of Tables

| Table 1. Percentage of Adults Who Read Books Recreationally in 2002 According to Age |
|---|
| |
| Table 2. Reading Trends for 9, 13, and 17-Year-Olds |
| Table 3. Reading Comprehension Score Trend for 17-Year-Olds between 1984 and 2004 |
| |
| Table 4. Reading Achievement Trends, 4 th , 8 th , and 12 th Graders |
| Table 5. Descriptive Statistics for Reading Interest, Reading Purpose, Reading Maturity, |
| and English II EOC Scores |
| Table 6. Frequency and Percentage Summary of English II EOC Proficiency Level 55 |

Chapter One

Introduction

Reading has been an essential part of human existence since the first scribes (Quay & Watling, 2009). The activity of reading has been the source of information that has been both helpful and harmful, serving as a tool for both liberation and oppression. Thus, reading's history is thorough and unique, as it has driven the course of humanity and the civilizations in many ways (Quay & Watling, 2009). Shaping, eroding, leading, and reflecting humanity, literature is the basis of religious dogma, political principles, established laws, and histories. Because of these functions, it can be argued that for individuals to understand themselves and others fully and to become productive citizens, it logically follows that everyone must read. Furthermore, researchers such as Paul (1993) and Guthrie, McGough, Bennett, and Rice (1996) have indicated that reading has significant consequences on the cognitive development of individuals and their ability to comprehend different forms of knowledge. This means that without the skill of reading, individuals risk experiencing serious disadvantages in their daily cognitive functions.

Once the conclusion that reading is essential to human success is accepted as true, both on a societal and an individual cognitive basis, it becomes necessary to study reading routines, behaviors, and skills to gain a better understanding of how reading is integrated into life (Quay & Watling, 2009). Therefore, it is appropriate to examine how different populations within a society read to determine which elements of reading routines, behaviors, and skills are used to guarantee its successful functioning. Thomas (2001) linked several facets of reading that seem to be integral to reading comprehension and cognitive development. These include, but are not limited to, reading interest, reading purpose, and reading maturity.

Conceptual Framework and Background

The current study was rooted in the findings about reading comprehension established by Adler (1940), and developed by subsequent researchers like Gray (1951) and Biancarosa and Snow (2004). Findings, summarized by Gray (1951), showed that reading is comprised of not just deciphering symbols, but making meaning based on these symbols, and applying these meanings to the expansion of personal knowledge. Within such a process, reading comprehension takes place when the reader deciphers and understands meanings from written text. According to Gray and Rogers (1956), the act of reading comprehension involves understanding what has been read and can be measured by the amount of understanding a reader has after being exposed to a given text.

This concept of reading comprehension is also related to the concept of reading maturity first investigated by Gray and Rogers (1956). Reading maturity involves the capability of a reader to extract information and insight from texts and apply them in different situations. It involves the ability to think critically regarding information and decide how it may be applied or used (Gray & Rogers, 1956; Manzo & Manzo, 1993). Thus, as reflected by Manzo and Manzo (1993), readers who are more mature have more advanced levels of reading comprehension and a greater capacity for critical application of what they have comprehended.

The importance of reading maturity. Scholars in the field of literacy have agreed that reading is an essential component to academic development (Adler, 1940;

Biancarosa & Snow, 2004; Eisner, 2005; Thomas, 2001). These literacy theorists and practitioners have also agreed that reading is necessary for the intellectual, emotional, and social development of individuals. Furthermore, reading, as regarded by these scholars, also involves different degrees of proficiency (Biancarosa & Snow, 2004). This finding reflects the concept of reading maturity, which has been defined as the capacity of the reader to apply information comprehended from texts in different experiences, and toward the expansion of his or her knowledge (Biancarosa & Snow, 2004). Reading maturity has also been defined as having three derivative concepts, namely reading the lines, reading between the lines, and reading beyond the lines, which were explained by Thomas (2001) as follows:

"Reading the lines" involves decoding the words to reconstruct the author's basic message. "Reading between the lines" involves making inferences to reconstruct the author's implied messages. "Reading beyond the lines" involves judging the significance of the author's message and constructively applying it to other areas of knowledge and experience. (p. 1)

In essence, to acquire the full benefit of reading, or even reading regularly, readers must not only understand what they read, but also the implications and constructive application to other experiences (Thomas, 2001).

Teaching critical reading. Critical reading involves a proper comprehension of what is being read and the ability to analyze the concepts and apply them to similar situations in a logical manner (Guthrie et al., 1996). According to Paul (1993), the rigid and mechanical monotony of the current pedagogy found in almost all learning institutions in the United States results in thinkers who do not critically analyze the

situations with which they become involved. Thus, they have been subjected only to lower-order learning, or teaching through "sheer association or rote" (Paul, 1993, p. 3). Guthrie et al. (1996) noted the lack of critical thinking and developed a framework for teaching critical reading to avoid the simple reiteration of information that could lead to uncritical reading and thinking. Based on the framework, students must be taught to fully comprehend concepts in such a way that they can communicate them coherently and apply them logically, and includes a process for educators to help students achieve deeper understanding of a topic. Guthrie et al. (1996) argued that this process includes the search and retrieve phase, where students must recall and identify concepts encountered in reading. The next phase, called the comprehend and integrate phase, allows students to apply these concepts. The last stage, the communication to others phase, requires students to be able to talk to others about what they know. Together, these phases reflect a means of teaching that makes use of the student's full range of cognition, rather than information retrieval or memorization alone (Guthrie et al., 1996). In this framework for critical reading, tapping into the full range of cognition means ensuring critical analysis and comprehension of what is being read. The absence of similar teaching frameworks has resulted in people who are egocentric, dogmatic, judgmental, and ineffective in communication (Paul, 1993).

Statement of the Problem

According to Murnane, Sawhill, and Snow (2012), the 21st century presents greater demands on the reading comprehension skills of American youth. Because of increased competition the world over, American children must now exhibit reading skills of a higher caliber compared to their counterparts from years past. However, according to these scholars, most schools and instructional views regarding reading instruction overemphasize the value of lower-level skills such as speed in reading, summarizing, and memorizing details. As reading instruction evolved, what was emphasized was that such instruction should be used in more holistic approaches to comprehension and complex thought (Manzo & Manzo, 1993; Thomas, 2001). As a result of this evolution, there has been little or no information available on the reading behaviors of developing readers and their relationships with reading comprehension. Thus, researchers and educators alike do not have the necessary knowledge regarding the kinds of practices required to develop deeper reading comprehension. The existing literature has instead been focused on measuring comprehension, in lieu of endeavors to develop and understand the skills and routines needed to deepen reading comprehension (Biancarosa & Snow, 2004; Carver, 2000a).

Purpose Statement

The purpose of this study was to achieve a deeper appreciation and understanding of how different facets of reading relate to the reading comprehension of students. This study was designed to determine the strength of the relationship between reading interest and reading comprehension. The study was also designed to determine the relationship between reading purpose and reading comprehension, as well as the relationship between reading maturity and reading comprehension.

Significance of the Study

The findings from this study may add new knowledge to the field of research by paying particular attention to three different aspects of reading, namely reading interest, reading maturity, and reading purpose, and how they relate to reading comprehension of

students. The study could be of significant use to academics, as its findings may contribute to the disparate literature on elements of the development of reading skills such as reading maturity, reading interest, reading purpose, and reading comprehension (Gregory & Kuzmich, 2005). The findings of the study may also contribute to the knowledge of educational leaders, giving insights on how to teach reading comprehension more effectively by showing which aspects of reading ought to be emphasized to deepen comprehension. Once a better understanding of how reading comprehension relates to other facets of reading has been derived, information becomes available for other researchers to better explore the concept of reading comprehension. Findings established in this study may be used to create reading education systems that help students to develop deeper levels of comprehension. While there have been studies on possible improvements to reading pedagogy (Gregory & Kuzmich, 2005), this study could add to that body of literature to improve an instructional system that is struggling to reach adequate achievement levels related to reading comprehension for too many students.

Delimitations

This study explored the general association between reading purpose, reading interest, reading maturity, and the reading comprehension of XYZ School District students. Therefore, this study was only concerned with the measurement of reading comprehension through scores achieved on standardized reading comprehension exams administered through the school district. Specifically, the Missouri Assessment Program (MAP) was treated as the measure for reading comprehension scores of the student participants. The MAP measures the comprehension of the students, relative to their reading skills. This study was further limited by its exclusion of background variables like the influence of cultural and social factors. Another delimitation applied to the study was the fact that only one reading comprehension test was taken into consideration. Delimitations for this study also included the fact that test scores were limited to those collected during the 2012-2013 school year. Another delimitation was in the study's sample, which was limited to 11th grade XYZ high school students enrolled in an English/language arts course.

Assumptions

To conduct this study, it was assumed that students can be categorized based on their reading practices as either more mature or less mature readers. Furthermore, it was assumed, for the purpose of this study, that the MAP administered to students was based on an appropriate scale to measure reading comprehension. Additionally, it was assumed for this study that students who were surveyed understood the survey questions and provided an accurate description of their purpose and interest in reading and that students surveyed represent a representative cross section of the population.

Research Questions

Four research questions were posed to achieve the purpose of this quantitative research study. The research questions were as follows:

RQ1. What are the reading maturity, reading interest, reading purpose, and reading comprehension scores, as measured by the Missouri Assessment Program (MAP), of the sampled high school students in the XYZ School District?

RQ2. To what extent is there a statistically significant relationship between the reading interest and reading comprehension of the high school students in the XYZ School District?

RQ3. To what extent is there a statistically significant relationship between reading purpose and reading comprehension of the high school students in the XYZ School District?

RQ4. To what extent is there a statistically significant relationship between reading maturity and reading comprehension of the high school students in the XYZ School District?

Definition of Terms

This section includes the various terms used to refer to concepts pertinent to the present study. The definitions for these terms, as used in this study, are included in this section. Although they may be used differently in other contexts, the definitions of these terms shall only include those mentioned in this section.

Reading comprehension. This concept is the amount of understanding a person has after reading a particular text, and involves the ability to decipher what has been read and to apply it logically to other situations (Gray & Rogers, 1956; Henk, 1988; Manzo & Manzo, 1993).

Reading interest. Reading interest has been used to refer to reader perception in regards to the degree to which a reader enjoys reading or considers it potentially exciting or interesting (Thomas, 2001).

Reading maturity. Reading maturity is a level of reading ability allowing the reader to extract meaningful and relevant inferences from the text and apply these in other situations and experiences (Gray & Rogers, 1956).

Reading purpose. This concept has been used to refer to the reasons a person chooses to read. These have typically included recreation, understanding life, understanding others, and understanding one's self (Thomas, 2001).

Overview of Methods

This study explored the reading maturity of students by both assessing their reading maturity and reading comprehension levels via proven instrumentation. For this, a non-experimental correlation research design was implemented. This enabled the researcher to determine whether there were statistically significant positive or negative relationships between the following pairs of variables: reading purpose and reading comprehension, reading interest and reading comprehension, and reading maturity and reading comprehension. The data for this quantitative research study were gathered from high school students in the XYZ School District. Calculation of descriptive statistics aided in the analyses used for this study. The use of the correlation coefficients helped examine relationships between the variables.

Organization of the Study

In this chapter, an overview was provided as it applies to reading comprehension, trends in reading comprehension, and studies that have applied to the area of this study. This information was applied to the study, which was then described. The study was presented as one that used a quantitative research design that included identifying significant relationships between reading interest, reading comprehension, and reading maturity. Research questions were introduced, a theoretical framework was constructed, and finally, assumptions, the scope, delimitations, and generalizability were discussed. In chapter two, a comprehensive overview of the literature that relates to reading comprehension, reading habits, and reading maturity established the research basis of this study. In chapter three the comprehensive discussion on the research methodology, including the research design, population and sampling, sampling procedures, instrumentation, hypotheses testing and data analysis, and limitations of this study are presented. Chapter four contains the results of data analyses, while chapter five is comprised of the study's discussion and findings.

Chapter Two

Review of Literature

According to Gray (1951), reading is simultaneously comprised of deciphering what is stated, what is inferred, and what is suggested. In this way, it is assumed that the most effective application of reading would understand what is said, applying this understanding to the expansion of their knowledge, and applying the new knowledge to other areas of interest to determine new conclusions independently. Whereas many people can read, of those who do, most cannot read well, or cannot apply what they read – an assertion reflected by the term proficient reader (Iyengar, 2007). For example, Adler (1940) mentioned:

I was one of the satisfactory students in my day at Columbia. We passed courses with creditable marks. The game was easy enough, once you caught on to the tricks. If anyone had told us then that we did not know much or could not read very well, we would have been shocked. We were sure we could listen to lectures and read the books assigned in such a way that we could answer examination questions neatly. That was the proof of our ability. (pp. 6-7)

This excerpt included information pertaining to the fact that there are Ivy League students who do not know how to read well, or who would not be considered proficient readers. This exemplifies the mechanical monotony of the approach that schools take with respect to reading, failing to incorporate any cognitive thought or critical comprehension, which are necessary to reading as well. Paul (1993) purported that institutionalized American education does little to fully educate or prepare students for a transition into the workforce. Instead, Paul (1993) asserted that students fail to be mature critical thinkers

because of the manner of training they receive in school. Students mostly receive very limited instruction with respect to reading, thus also limiting the scope of their capabilities in the workplace (Paul, 1993).

Additionally, Paul (1993) indicated that there is a direct correlation between the intellectual and social functionality of an individual, and his or her reading ability and ability to process information. Thus, it is crucial to scrutinize the kind of reading instruction individuals receive as they grow and develop, as well as the different elements and facets that comprise the act of reading itself. It is to be noted that the ability to process information depends on the kind of reading instruction. These different facets affecting reading and comprehension were studied, along with their specific sources and effects to inform existing methods of reading instruction better.

Reading Instruction

The roots of modern reading instruction in the United States can be traced to Noah Webster's *Blue-Backed Speller* (McGuinness, 1998). A resource used in the 1700s, *Blue-Backed Speller* focused on teaching the correspondences between English letters and their intended sounds. Students learned the sound for each letter in the alphabet, and then practiced reading the sounds and making words. The *Blue-Backed Speller* instructional model consisted of memorization of the 26 letter sounds, plus all the rules and all the exceptions to all the rules. This phonetic approach of teaching letter-sound correspondences, along with rules for all the exceptions to the rules, soon came to be known as phonics (McGuinness, 1998) which was a nickname for phonetics. Phonetics is the term used to describe the sounds of a given language. Phonics instruction evolved from the idea that the English written language is so confusing that it needs rules, regulations, and contingencies to be learned (McGuinness, 1998).

In the 1700s, and today in 2014, phonics deals in letters and the sounds they represent. This kind of arbitrary memorization of two seemingly unrelated items is called paired associate learning (McGuinness, 1998). Paired associate learning is very difficult for young children. The problem with teaching the various sounds that letters represent is that there is no relevance in a sound alone. It has no meaning until it is placed in a word. An additional problem lies in the use of rules to teach the sounds that groups of letters represent. This kind of contingent logic is called propositional logic. Not only is the logic difficult to follow, but it is also frequently wrong (McGuinness, 1998).

Over time, alternative reading instructional models emerged. Most noteworthy was the whole language approach to reading instruction because of the recent trend that reading is directly related to reading comprehension. From the use of big books (large format books that displayed text in large print) to invented spelling (the notion that any approximation of a word is acceptable), classroom teachers embraced the principles of whole language in the early 1990s. The theory behind whole language was that children do not need to know the code used for reading to read the English language (McGuinness, 1998). The architects of whole language believed that the English written code for written English is too irregular to be learned. Whole language innovators believed that children could learn to recognize an infinite number of whole words. Literature was used to excite the child about learning to read, so that children began to memorize the many words they saw in books. "Invented spelling" was allowed and even encouraged, as children were expected to materialize into readers and writters

(McGuinness, 1998). Teachers were, for the first time in the history of compulsory education, not just allowed to be innovative, but actually encouraged to be so. The phenomenon passed the idea quickly from theory to classroom, and teachers became leaders of whole language innovation. Unfortunately, whole language instruction lacked evidence of effectiveness (McGuinness, 1998). Children do not recognize whole words like they recognize other familiar objects in their visual world. Reading is not based on a visual stimulus, but on an audio one, namely the sound (McGuinness, 1998).

According to McGuiness (1998), neither phonics nor whole language instruction has sufficiently served as an effective literacy program. Teachers commonly attempted to combine instructional pedagogy into a mixed methods approach. An independent observational study conducted by the Read America Clinic in 1993 and 1994 found phonics practices were in place and mixed with whole language practices in 16 out of 17 randomly selected public schools in five Central Florida counties (McGuinness, 1998) and found that reading comprehension was already an important factor back then.

Lengyel (2010) conducted a study that attempted to identify positive reading instruction behaviors in the classroom that helped reinforce students' reading behaviors. The researcher noted that the reading behaviors of students, as well as the type of instruction they received, directly influenced their reading motivation and comprehension. According to the researcher, one important instructional strategy that must be used is the enforcement of reading schedules and routines, which provides students with a structure for the reading behaviors. More importantly, though, the researcher noted that instructors must give students the opportunity to be heard regarding their opinions, and given information regarding how they read and learn. Combined, these two strategies help individuals become more successful at comprehension, and more motivated to read for longer periods of time. These findings were echoed by Tobing (2013) who found that the strategies and routines used for reading, as well as the confidence regarding the capacity to read and learn, were important predictors of reading comprehension.

A report to the Carnegie Corporation of New York offered a vision for effective literacy programs. According to Biancarosa and Snow (2004) who submitted a research report based on actual data, 15 key elements of effective adolescent literacy programs exist, including:

- Direct, explicit comprehension instruction, which is instruction in the strategies and processes that proficient readers use to understand what they read, including summarizing, keeping track of one's own understanding, and a host of other practices;
- Effective instructional principles embedded in content, including language arts teachers using content-area texts and content-area teacher providing instruction and practice in reading and writing skills specific to their subject area;
- 3. Motivation and self-directed learning, which includes building motivation to read and learn and providing students with the instruction and supports needed for independent learning tasks they will face after graduation;
- 4. Text-based collaborative learning, which involves students interacting with one another around a variety of texts;

- 5. Strategic tutoring, which provides students with intense individualized reading, writing, and content instruction as needed;
- 6. Diverse texts, which are texts at a variety of difficulty levels and on a variety of topics;
- Intensive writing, including instruction connected to the kinds of writing tasks students will have to perform in high school and beyond;
- 8. A technology component, which includes technology as a tool for and a topic of literacy instruction;
- On-going formative assessment of students, which is informal, often daily assessment of how students are progressing under the current instructional practices;
- 10. Extended time for literacy, which includes approximately two to four hours of literacy instruction and practice that takes place in language arts and content-area classes;
- 11. Professional development that is both long-term and on-going;
- 12. On-going summative assessment of students and programs, which is more formal and provides data that are reported for accountability and research purposes;
- 13. Teacher teams, which are interdisciplinary teams that meet regularly to discuss students and align instruction;
- 14. Leadership, which can come from principals and teachers who have a solid understanding of how to teach reading and writing to the full array of students present in schools;

15. A comprehensive and coordinated literacy program, which is interdisciplinary and interdepartmental and may even coordinate with out-of-school organizations and the local community. (pp. 12-13)

These 15 elements can be easily tied into Thomas' (2001) premises of reading maturity, and seem to facilitate the reading proficiency of a reader into maturity or improved comprehension (Biancarosa & Snow, 2004; Thomas, 2001). Almost appearing to be a further extrapolation of Thomas' (2001) research on reading maturity, a curriculum that integrates this model would be a pursuit for reading maturity just as much as it would be for fundamental reading comprehension and efficacy (Biancarosa & Snow, 2004; Thomas, 2001).

Because of a lack of pedagogical information, or a lackluster attitude that teachers have adopted in regards to reading comprehension, there have been obvious gaps between these conclusions and their significance in practice. For example, Sadoski (2004) identified essential components of the complex intellectual infrastructure involved in the reading experience of students, including the psychomotor domain, the affective domain, and the cognitive domain. The psychomotor domain refers to the integration of mind and body; that is, the decision to do something, and the actual initiation of that endeavor. The affective domain refers to the aspect of cognition governing attitudes, interests, and other means of constructing an overall concept of one's life. Furthermore, the affective domain applies to the habits one adopts, reactions to situations, and the philosophies one retains. The cognitive domain refers to skills including information retrieval, summarization, analysis, synthesis, and evaluation. These concepts could be very easily integrated into a construct based on reading maturity, but are instead often distinguished as isolated pedagogical systems, without being integrated into the reading experience of the students (Sadoski, 2004).

Rauding is a synthesis of the words "read" and "auding," which respectively mean to decipher written language and comprehend what is deciphered (Carver, 2000b). Developed by Carver, this definition referred to the similarity between the cognitive processes that are experienced when one reads and listens to information (Carver, 1982). This was derived from a statement made by Sticht (1972) that "there is only one, holistic ability to comprehend language, and one should be able to comprehend equally well by listening or by reading, if one has been taught to decode well and other task variables are equalized" (pp. 293-294). The decoding process of meanings is related to the level of comprehension of the reader. This has had minor underpinnings of support for the previously mentioned critical thinking argument, but otherwise directly coincided with the more common assertion that cognition, communication, and reading are all directly linked and essential to one another.

According to Carver (2000b), there are a great number of differences between reading and listening, in that reading contains no augmentation to enhance comprehension such as tonal or nonverbal cues. To truly engage in rauding, according to Carver (2000b), one must possess reading fluency, which refers to silent reading and the immediate identification of words, or in other words, the ability to receive communication without any assistance from what would be found in conversation (for example, the tendency of unskilled readers to read aloud).

Reading Trends

Iyengar (2007) summarized the percentage of adults grouped by age who read recreationally in 2002. Iyengar (2007) compiled national information regarding the trends in recreational reading and reading demographics. A bell curve of 44% can be deduced from the percentages with adults reading the least at the upper and lower extremes, and most concentrated in the center as the reflected population reaches middle age. At this point, recreational reading rose almost 10% to accommodate 61% of the total population of adults in the study. Based on the data presented in Table 1, adults between the ages of 45 and 54 were the most widely read. However, it is to be noted that wide readership is not to be equated to the frequency of readership. On the other hand, individuals older than 75 years were the least likely to read recreationally, followed by individuals between the ages of 18 and 24.

Table 1

| Age | Percentage |
|---------|------------|
| 18 - 24 | 52% |
| 25 - 34 | 59% |
| 35 - 44 | 59% |
| 45 - 54 | 61% |
| 55 - 64 | 58% |
| 65 – 74 | 54% |
| 75+ | 44% |

Percentage of Adults Who Read Books Recreationally in 2002 According to Age

Note: Adapted from "To Read or Not To Read: A Question of National Consequence" by S. Iyengar, 2007, Washington, DC: National Endowment for the Arts.

Table 2 provides trends in reading between 1984 and 2004 for American students. The table shows how frequently individuals of different ages (9, 13, and 17) read every year. The table also shows how these frequencies changed over the years. For all ages, except for nine year olds, there was a general decrease in reading habits in terms of reading frequency between 1984 and 2004, with a slower rate of decline reflected during the latter decade. However, the oldest sample showed the most dramatic decline in reading frequency, with more than twice the 17 year olds in 2004 reporting that they almost never read compared to the 17 year olds in 1984. The number of responses indicating reading only a few times a year grew by 50%, and actually began to decrease for numbers reflecting more reading frequency for the sample; the percentage of 17 year olds reporting that they read daily decreased by 30% in those same 20 years. From this information, it is clear that there has been a substantial decline in reading interest, which may be related to a similar decline in reading comprehension scores (Iyengar, 2007).

Table 2

| Age | Year | Almost every day | Once or twice a week | Once or twice a month | A few times a year | Almost never |
|-----|------|---------------------|-------------------------|-----------------------------|--------------------------|-----------------|
| 9 | 1984 | 53% | 28% | 7% | 3% | 9% |
| | 1999 | 54% | 26% | 6% | 4% | 10% |
| | 2004 | 54% | 26% | 7% | 5% | 8% |
| 13 | 1984 | 35% | 35% | 14% | 7% | 8% |
| | 1999 | 28% | 36% | 17% | 10% | 9% |
| | 2004 | 30% | 34% | 15% | 9% | 13% |
| 17 | 1984 | 31% | 33% | 17% | 10% | 9% |
| | 1999 | 25% | 28% | 19% | 12% | 16% |
| | 2004 | 22% | 30% | 15% | 14% | 19% |

Reading Trends for 9, 13, and 17-Year-Olds

Note: Adapted from "To Read or Not To Read: A Question of National Consequence" by S. Iyengar, 2007, Washington, DC: National Endowment for the Arts.

Table 3 enumerates the reading comprehension scores for 17-year olds between 1984 and 2004. The United States Department of Education's National Assessment of Educational Progress (NAEP), known as "the Nation's Report Card," has tracked achievement test scores of elementary, middle, and high school students for a range of subjects since 1969. In addition to this main assessment, conducted nationally and at the state level, the NAEP provides a long-term trend assessment of 9, 13, and 17-year-olds in reading and mathematics. The trend assessment is based on a nationally representative sample and is conducted roughly every four years. It shows a general 4 point decline in the reading comprehension scores of participants over a 20-year period (Iyengar, 2007).

Table 3

| Year | Score |
|------|-------|
| 1984 | 289 |
| 1988 | 290 |
| 1990 | 290 |
| 1992 | 290 |
| 1994 | 288 |
| 1996 | 288 |
| 1999 | 288 |
| 2004 | 285 |

Reading Comprehension Score Trend for 17-Year-Olds between 1984 and 2004

Note: Adapted from "To Read or Not To Read: A Question of National Consequence" by S. Iyengar, 2007, Washington, DC: National Endowment for the Arts.

There has been a trend beginning in the early 1980s and reaching into the millennium of declining scores, with a reported final mean score in 2004 four points less than the mean score in 1984, and five points less than the highest mean score just one year following. However, it is to be noted that there may be a possibility that the data gathered was just a random fluctuation. This information, applied alongside the information in Table 1, also relates to the fact that an initial reading fluency or a basic reading comprehension does not necessarily relate to reading maturity or capability of the reader. Progress in reading ability can be prevalent at any time (Biancarosa & Snow, 2004; Chall & Jacobs, 2003; Chase, 1961; Guthrie et al., 1996; Manzo & Manzo, 1993; Thomas, 2001). Therefore, it can be inferred that the locus of diminishing, hindered, or curtailed advancement of reading comprehension is most often present between ages 13

and 17, or between grades 8 and 12. Essentially, an aspect, predictor, or influence in high school may lead to a decline in reading development because these can be significant factors during high school (Iyengar, 2007).

Additional evidence to support this premise can be found in further statistics. According to Iyengar (2007), there have been trends in reading achievement that demonstrate regression of reading achievement for students in 4th and 8th grades who read at "below basic," 12th grade students who read at both "basic" and proficient or above" levels as illustrated below in Table 4.

Table 4

| | Grade Level | 1992 | 2005 |
|---------------------|------------------|------|------|
| Below Basic | 4 th | 38% | 36% |
| | 8^{th} | 31% | 27% |
| | 12^{th} | 20% | 27% |
| Basic | 4^{th} | 62% | 64% |
| | 8^{th} | 69% | 73% |
| | 12^{th} | 80% | 73% |
| Proficient or Above | 4^{th} | 29% | 31% |
| | 8^{th} | 29% | 31% |
| | 12^{th} | 40% | 35% |

Reading Achievement Trends, 4th, 8th, and 12th Graders

Note: Adapted from "To Read or Not To Read: A Question of National Consequence" by S. Iyengar, 2007, Washington, DC: National Endowment for the Arts.

Facets of Reading

Thomas (2001) delineated Gray & Roger's (1956) research findings and incorporated the research findings of Manzo and Casale (1981, 1983a, 1983b), Casale (1982), and Manzo, Manzo, Barnhill, and Thomas (2000) to generate six facets of reading. These included reading interests and attitudes, purpose, ability, reaction and application, types, and adjustment. Reading ability is defined by the ease with which a person reads and the fluency they have in the language they are reading (Thomas, 2001). These include, but are not limited to, comprehension, vocabulary, and the comfort with which one engages in reading-related endeavors. Reaction and application are related to a reader's emotional and intellectual investment in the material that the student is reading, in that they not only process the material, but they also apply it to their own inferences to develop informed opinions, and other areas of knowledge to improve general understanding (Thomas, 2001). Types refer to the variety of reading material one engages in, and adjustment refers to changes one makes in his or her life in response to the things that he or she has read (Thomas, 2001).

Reading maturity. The field of literacy research has historically lacked consistency with respect to findings on reading maturity (Thomas, 2001). The concept of a mature reader was not initially given much attention in literature, as it was not considered an academic standard or a lifestyle necessity to sustain positive and constructive reading habits (Adler, 1940; Bloom, 2000; Hirsch, Kett & Trefil, 1988). This could be the result of an assumption that basic reading skills were likely to naturally progress to reflect adequate or advanced reading capacities, but a multitude of research has provided evidence that this is not necessarily so (Biancarosa & Snow, 2004; Chall & Jacobs, 2003; Chase, 1961; Guthrie et al., 1996; Manzo & Manzo, 1993; Thomas, 2001). From this identified disparity between basic reading skills and habits of mature readers, one could infer that there were undetected deficits when an individual achieved basic literacy. These deficits can hinder further progress into reading maturity (Manzo & Manzo, 1993; Thomas, 2001). Reading maturity is often achieved when the disparities are eliminated and basic reading skills coincide with habits of mature readers.

Hindrances to reading maturity may be caused by various factors; however, none of these has been fully explored in literature (Manzo & Manzo, 1993; Manzo et al., 2000; Thomas, 2001). Powell-Brown (2003) claimed that there was a lack of agreement among researchers and practitioners in the field of literacy regarding how they defined and measured reading maturity. Such disagreement could have made the identification of the challenges to reading maturity more difficult.

Reading maturity first received professional scrutiny in the 1950s, when it was identified, explained, and researched by Gray and Rogers (1956). The concept was extrapolated upon by Casale (1982), who explained reading maturity as an advanced level of reading that results in logical inferences applied to other areas of knowledge. Reading maturity referred to an advanced level of cognition required to expand the reader's breadth of knowledge and apply it to everyday life. Reading maturity also referred to a literary fluency that suggests that reading should eventually be second nature, in that it should be applied with little to no effort.

Gray and Rogers (1956) defined reading maturity as "the attainment of those interests, attitudes and skills which enable young people and adults to participate eagerly, independently, and effectively in all the reading activities essential to a full, rich, and productive life" (p. 56). Based on this definition, reading maturity is an internal characteristic, defined by the attitudes and interests of individuals. As such, it is sometimes difficult to quantify and measure (Theiss, Philbrick, & Jarman, 2009). However, as the definition provided by Gray and Rogers (1956) also emphasizes, reading maturity has some outward manifestations in the form of skills that allow individuals to use reading to lead full lives. Thus, reading maturity can be summarized as a set of internal factors that allow individuals to use information from reading to supplement and improve their own lived experiences.

Theiss et al. (2009) added four other evidences of reading maturity based on the definition provided by Gray and Rogers (1956), as well as on the different assertions of previous researchers. According to Theiss et al. (2009), firstly, mature readers are known for their enthusiasm with respect to the activity of reading. The prospect of engaging in the activity is something that causes excitement among mature readers, making them more widely read than other individuals who have not reached the same levels of reading maturity. Moreover, their eagerness for reading leads them to more in-depth analyses of the materials they peruse, making them not just wide-readers but also intensive ones.

Secondly, Theiss et al. (2009) also highlighted the fact that mature readers are better able to grasp meanings that are not literal from their reading materials. Mature readers do not only comprehend the dictionary definitions of the words they read, but they also grasp their implications within the context of the written work. They can infer and understand the different moods and feelings infused by the writer in the material, and can adjust the meanings of what they read according to these contexts. Thirdly, Theiss et al. (2009) noted that when mature readers understand moods and feelings within the written material, they also use the information in order to inform their experience and knowledge outside the written work. This ability can be referred to as critical reading. Here, the reader is able to relate what is found on the page to real life scenarios and circumstances.

Finally, according to Theiss et al. (2009), mature readers know when a particular written work is difficult to comprehend. According to these researchers, more mature readers have the ability to discern when they cannot comprehend something in its fullest sense. Furthermore, this ability to sense an inability or a difficulty in the process of reading allows mature readers to adjust their pace of reading to accommodate their learning. Mature readers can tell how much time they need to comprehend properly written material, not just in its literal sense, but also in its figurative sense, allowing for an intensive and critical understanding of what the writer attempted to evoke.

Because of the number of useful skills and attitudes that comprise reading maturity, researchers have valued it as an important facet of reading that learners should acquire (Theiss et al., 2009). However, according to Theiss et al. (2009), reading maturity and the skills and attitudes that comprise it are not easily achieved by most individuals. Hence, it is something that must be deliberately sought and taught, thus necessitating the need for adequate teaching and monitoring techniques within classrooms. Without such techniques, the acquisition of reading maturity will be left to chance, and will not be tailored to the needs of each individual student, thus jeopardizing learners' chances of becoming more mature readers and reaping the benefits of this facet of reading.
Levels of reading maturity. Chall and Jacobs (2003) measured the concept of reading maturity on a five-point scale, with five reflecting the highest degree of reading maturity. The top-level concerned readers read a range of complex literature that covered a breadth of subject matter and perspectives. Stage one was designated as the lowest level of reading maturity, referring to the most basic understanding of read text with an application of the smallest vocabulary. Between the top and lowest levels, were three stages with intermediate skills and capacities of reading resulting in different levels of reading comprehension.

Types of reading maturity. According to Manzo and Manzo (1993), there are four types of critical reading and thinking, which they delineated as follows:

Type A: Mature Comprehenders: students have a solid reading comprehension and a commensurate ability to think critically.

Type B: Remedial Readers: students have a weak comprehension and critical thinking skills. These remedial-level readers tend to have lower levels of abstract thinking and show signs of emotional instability, mostly in the form of apathy and emotional dependency.

Type C: Higher Illiterates (Overachievers): students have high comprehension and weak or intermittently good to poor critical thinking skills. This group seems to personify Chase's (1961) term *higher illiterate*. Ironically, these students have fair to good levels of abstract thinking, though average to poor levels of emotional stability, characterized mostly by a desire to be dominant while remaining aloof. *Type D: Classic Underachievers:* students have weak comprehension and generally high levels of critical thinking. This group also has fair to good levels of abstract thinking and average to poor levels of emotional stability. (p. 251)

From these categories, one could infer that there was a correlation between emotional stability or intelligence and reading comprehension or analytical skills (Manzo & Manzo, 1993). Manzo and Manzo (1993) reaffirmed their findings that it is necessary to approach all aspects of a student's development, because emotional disturbances can potentially intervene in a child's academic development. These findings on reading development included findings that reading maturity requires maturity in all areas of cognitive development, and that a holistic maturity is important to acquire reading maturity. In this way, it can be said that cognitive development is just as contingent on reading maturity, as reading maturity is dependent on cognitive development.

Reading purpose. Reading purpose has been defined as the reasons behind an individual's act of reading. Thomas (2001) considered four general purposes behind reading, namely to be entertained, to understand life, to understand oneself, and to understand others. Based on this enumeration by Thomas (2001), reading has both pragmatic and recreational purposes. Adetoro (2010) expanded on the former, noting that reading arises from certain needs that individuals have. According to Adetoro (2010), reading can address individuals' needs to minimize the ambiguity in their surroundings, to find solutions to problems they encounter, to survive difficult circumstances, and to enhance personal growth.

According to Linderholm (2006), it is intuitive to believe that the purpose with which individuals read influences the entire process of reading, as well as its various outcomes. However, according to the researcher, it was only in the several years preceding her study that scientists were able to establish the crucial effects of reading purpose (Linderholm, 2006). Linderholm (2006) emphasized that reading purpose has been established in academic literature as a determining factor in achieving certain measures of reading success. The researcher illustrated her point by using the example of students reading for an examination. According to Linderholm (2006), when students read with the purpose of memorizing facts and figures, they fail to adjust their reading process to account for a more critical understanding of the text. Their inference-making patterns and other cognitive processes differ significantly compared to when they are reading for recreational or personal purposes. In such cases, students are better able to draw inferences from what they are reading, and are better able to apply these to previously learned concepts to other circumstances in their lives. In this case, students are better able to read the material before them critically. Hence, being aware of the purpose behind a reading activity significantly alters the reading process as well as the different outcomes of such a process for the individual (Linderholm, 2006).

Linderholm, Cong, and Zhao (2008) emphasized that significant findings have established the importance of reading purpose to comprehension and reading success. According to them, when individuals are cognizant of their reading purpose, they use different skills and tap into different resources in order to achieve their goals (Linderholm, 2008). The researchers noted that reading for an important work-related task is a different process requiring different skills compared to reading casually to gather information for entertainment. Because of the different skills and capacities necessary for different purposes of reading, Linderholm et al. (2008) hypothesized that reading comprehension and reading success are functions of reading purpose that could be mediated by individual differences in specific skills and capacities pertinent to reading. The researchers argued that if readers did not have the necessary skills to succeed at a particular reading purpose, then they would not be able to achieve their reading goals or to comprehend the materials in the context of their goals.

To test their hypothesis, Linderholm et al. (2008) conducted an experiment among readers classified as either having low rate of working memories or high rate of working memories. They were then asked to read materials either for entertainment purposes, or for the purpose of studying and learning. The researchers found that individuals with lower working memories were more likely to take longer when reading for entertainment purposes. On the other hand, individuals with a higher working memory capacity did not vary in reading time, whether their purpose for reading was for entertainment or for study and learning.

According to Linderholm et al. (2008), individuals with different working memory capacities also had significantly different cognitive processes with respect to reading for different purposes. Thus, the researchers were able to realize that their hypothesis was true. Based on their findings, success in reading was a function of reading purpose, as mediated by the different skills and capacities they may have, or that they may choose to tap.

Linderholm and Wilde (2010) noted a particular difficulty with respect to reading purpose. According to the researchers, there is often a discrepancy between the purpose with which individuals read, and the outcomes that they expect. To support this hypothesis, Linderholm and Wilde (2010) conducted an experiment wherein readers were asked to read several texts for different reasons, either for the purposes of entertainment, or for the purposes of studying and learning for an academic test. The researchers also asked participants to note their expected success in a reading test based on their reading purpose. A significant proportion of participants believed that reading for study would condition them to learn more and would translate to better results in a test taken thereafter. Conversely, they believed that reading for entertainment purposes would not amount to any significant learning, and therefore would result in poorer results in a subsequent test. However, based on the findings of the study, it was found that the belief of students with respect to purpose and the effects of their reading had no significant effects on their test results. Scores on tests after believing that the previous reading was for study did not vary significantly with scores on tests after believing that previous reading was for recreational purposes. Hence, the researchers noted that instructors must align students' reading purpose with the different reading skills and reading tools that they tap into during the process to positively affect test results.

Reading interest. According to Thomas (2001), reading interest refers to how excited an individual is to engage in reading some written material. It can also refer to an individual's perception of how stimulating or fulfilling reading material can potentially be. Based on the definition provided by Thomas (2001), reading interest revolves around an individual's attitude towards the process of reading, and towards different reading materials.

In a 1971 study, Brooks aimed to understand the relationship between reading interest and reading comprehension. The researcher used the hypothesis that a positive relationship exists between the two concepts. However, after an experiment requiring readers to understand certain passages and rate them for how interesting they were, the researcher found no statistically significant relationship between reading interest and reading comprehension.

Subsequent studies, however, have consistently established a link between reading interest and reading comprehension, contrary to the earlier findings of Brooks (1971). In a study conducted by Crosby (2013), reading attitude has been found to be an important component in reading comprehension. According to the researcher, earlier works had emphasized the need to explore the affective components of reading as predictors of comprehension. Crosby (2013) conducted a study addressing this need emphasized by earlier researchers and found that, after controlling for language and vocabulary skills, reading attitudes were able to independently influence reading comprehension. Adolescents with more positive attitudes to reading also had better comprehension scores.

Reading interest arises from different needs (Adetoro, 2010). Adetoro (2010) discussed that in all cases of reading interest, the attention may arise from the particular needs of an individual. In most cases, the interest to engage in the activity of reading arises from a need to gain information about the individual's surroundings and contexts. Reading allows people to gather information about the experiences they undergo. They acquire explanations for things that may confuse them. Hence, from reading, individuals are able to minimize the confusion and the ambiguity that may surround them in any situation, thus allowing them to respond appropriately to various stimuli.

Apart from minimizing the ambiguity and confusion in their surroundings, individuals also engage in reading for acquiring the ability to ascertain when a problem arises (Adetoro, 2010). Through reading, individuals gather information regarding the presence of concerns and issues that they may not have been sensitive to without the proper information. Furthermore, reading not only allows individuals to determine the presence of problems, it also allows them to derive solutions to these either directly or indirectly. Through reading, according to Adetoro (2010), individuals can acquire specific information on how to solve a particular problem. They can also apply general themes from their reading or relate these to their experiences, indirectly deriving a solution based on what they have read. Based on these assertions by earlier researchers, Adetoro (2010) noted that readers rely on the process of reading for their personal growth as well as for their survival.

Miranda, Williams-Rossi, Johnson, and McKenzie (2011) conducted a study regarding middle school students from Texas who had very little reading interest. The researchers termed such individuals reluctant readers and attempted to understand whether innovations in the process of reading, such as using e-reading techniques, could help pique their interests. Prior to conducting their study, however, the researchers noted the significance of reading interest, as asserted in earlier studies and findings in academic literature. Miranda et al. (2011) noted that according to several studies, evidence has been uncovered supporting the hypothesis that reading interest and engagement are the key factors that determine reading success. Simply put, when individuals are more interested in reading, they become more successful readers, as measured by their reading speed, their comprehension, and the quality of their vocabulary. Hence, increasing reading interest can be considered one of the more significant and effective ways by which to influence the success of individuals at reading. According to Miranda et al. (2011), individuals with high levels of reading interest often exhibit a number of positive reading behaviors. The researchers noted that these individuals are often not deterred by more difficult reading materials. Readers with a high interest and engagement in what they are doing are also usually determined in understanding ambiguous words, ideas, or contexts found in the written material. Furthermore, individuals with a high interest in reading usually derive more enjoyment from reading compared to others. Because of their interest and engagement, they often find the activity of reading as a pleasurable experience. Miranda et al. (2011) also noted that individuals with high levels of reading interest usually can be relied upon to share what they have read with others. They are more likely to recommend good books or reading materials to their friends or other interested parties.

Despite the number of positive effects that previous research has established with respect to reading interest, Miranda et al. (2011) noted that by the time individuals reach middle school, reading interest will have waned significantly. The researchers noted several sources for the decrease in reading interest during elementary schools. According to them, one of the fundamental reasons is a general lack of interest with respect to textual materials. When children reach their adolescence in middle school, they tend to be much less enthusiastic about reading compared to when they were younger, perhaps because of a lack of interesting materials, or a lack of skill to comprehend more demanding and more challenging written works aimed at their age group.

Miranda et al. (2011) also noted that another reason for limited literacy growth is time left for individuals to read when they reach middle school. The researchers noted that at this age, students begin to have many more engagements compared to when they were much younger. At this age, they begin to spend significantly more time with their friends and peer groups, prioritizing socialization over other activities. Furthermore, at this age, individuals begin to engage in various after-school activities such as sports and other organizations. Together, all these factors may lead to a decrease in the time and energy individuals have to read and to maintain their interest in reading. Because of the decrease in the time for reading, and the greater priority placed on other activities, individuals at this age suffer from waning reading interest.

In the academic literature, a great amount of emphasis has been placed on the lack of skills among readers by the time they reach middle school (Miranda et al., 2011). According to Miranda et al. (2011), this is because lack of skill has been found to be significantly linked to a lack of reading interest, and therefore, a lack of reading success. The researchers noted that according to other studies and national statistics, by the time children reach middle school, their reading skills are oftentimes found lacking, especially when measured against standards for the reading skills they ought to have mastered at that age. The lack of skill is exhibited in very specific ways. According to Miranda et al. (2011), middle school readers oftentimes meet difficulties in reading because of their inability to understand certain words and contexts included in the material. Furthermore, they lack the skill to infer what certain words or contexts mean by understanding the rest of the text. To complicate matters, one of the best ways to rectify this lack of skill is to read. However, because middle school readers have no interest in reading, their lack of skill is retained.

Miranda et al. (2011) added another challenge to acquiring higher levels of reading interest, technology. The interest in technology is also related to the interest in

reading comprehension because it is a mode of acquisition of information. The researchers noted that in the years preceding their study, technology had become a large part of the lives of younger individuals. By the time children reached middle school, they will have been surrounded by different technological innovations and gadgets that influence the different activities they engage in on a day-to-day basis, including reading. Thus, a growing number of young individuals have grown accustomed to reading not through traditional books printed and bound in paper, but through different technologies like computers and tablets. According to the researchers, such a context among present readers may influence the lack of reading interest observed among them. Because these readers are more used to reading from gadgets, they may find the task of reading from paper – the prevalent medium used in schools and educational institutions – a difficult and uninteresting activity. The differences between reading from gadgets and reading from books, such as font sizes, lighting, and even tactile sensations may be important factors that have led to the decline in reading interest among middle school readers.

Because of these challenges to reading interest, and because of the importance of reading interest in attaining reading success, Miranda et al. (2011) noted several ways through which educators could elevate the levels of reading interest among their students. It is important to elevate the interests of students to ensure that they are able to read more. According to the researchers, to overcome the lack of reading interest among students, educators need to determine the specific factors influencing their disinterest, whether these are linked to a lack of time or a lack of skill. Upon such determination, educators can then create reading training programs that respond to the particular needs of their students. Furthermore, the researchers noted that because of the role of technology in

reading interest, an argument could be made for using gadgets in teaching reading within schools to better engage students in the activity of reading that can elevate levels of reading interest, like the other solutions found by the researchers.

Effects of Reading

Humans use language to think (Mercer, 2000). Furthermore, studies by researchers such as Paul (1993) and Guthrie et al. (1996) mentioned that whether it is reading that predicates thinking or vice-versa, the absence of either could result in problems in communication, cognitive function, and even basic thought. For example, Manzo et al. (2000) stated, "the seeming more optimized and literate individuals seem to be empathetic, socially sensitive, confident, independent thinking, logical, creative men and women who actively embrace available knowledge and then seek to create and construct new knowledge" (p. 233). In other words, highly literate adults seem proportionately more likely to be productive members of society. Not only do regular reading habits improve cognitive and academic development, but people also experience social and emotional benefits (Manzo et al., 2000).

According to Kirsch (2001), the International Adult Literacy Survey evidenced that individuals who have higher levels of literacy in reading have a greater chance of attaining employment and earning larger salaries compared to their less literate and illiterate counterparts. Although this information was reflected in different proportions, it was consistently reflected in analyses derived from twenty-two different industrialized countries across the world. In different parts of the world, the importance of reading has been emphasized in different sectors of society. According to the National Assessment of Adult Literacy, adults with higher levels of reading proficiency are more likely to be employed full-time, are more likely to earn higher salaries, and are less likely to be unemployed than adults with lower reading proficiency levels. Adults with proficient reading skills are also more likely to be employed in professional occupations, are much less likely to be employed in service occupations, and are more likely to vote in an election. Women with higher reading proficiency levels are less likely to receive public assistance. Parents with higher levels of reading skills are more likely to teach their children the alphabet, talk to their children about school, and help their children with their homework (Kutner et al., 2007).

Gaps in the Literature

Manzo and Manzo (1993) found it necessary to approach all aspects of a student's development, in that emotional disturbances can potentially intervene in a child's academic development in order to accomplish the goals directly associated to education. In other words, this information contains implications that reading maturity requires maturity in all areas of cognitive development, and that a holistic maturity is pertinent to entertain reading maturity. In line with this discussion, Mar, Oatley, and Petterson (2009) and Thomas (2001) specified these potential attributes of the readers that may stimulate their emotion towards their reading habit, because reading habit is related to the amount of information to be acquired by a person. These attributes included reading interests and attitudes, purpose, ability, reaction and application, types, and adjustment, all of which are components of another facet of reading, maturity. Therefore, another gap can be found in how these areas of reading and learning relate to reading comprehension and literacy.

Summary

In this literature review, an overview was presented for literacy in general. Following this, a historical overview of reading comprehension and reading maturity was provided. Afterward, gaps in the literature were identified. The body of literature resulted in meaningful conclusions, particularly in an integration of facets of reading as an entire conceptual framework with respect to reading pedagogy and comprehension.

In the following chapter, the methodological design of this study will be explained. This study is of a quantitative design, and thus all of the methods and procedures that apply to this study will be delineated. Once these analyses are identified and explained, the chapter will conclude with how these approaches applied to the study in its entirety, and what the expected results would be, as well as a transition into the analysis chapter.

Chapter Three

Methods

Reading has significantly affected the course of civilization (Quay & Watling, 2009). To present ourselves in society and to understand one another, reading is an integral skill (Quay & Watling, 2009). In this light, this study investigated the relationships between reading interests, purpose for reading, and the scores in reading comprehension for 11th grade students in the XYZ School District. The different facets of reading comprehension have always affected the reading comprehension of students.

This chapter includes discussions on the research design used in the present study, along with considerations and justifications for the population selected, the sample, sampling procedures, instruments used in the study, data collection methods, data analyses and hypothesis testing. The chapter includes discussions on questions of ethical procedures, research questions, scope, assumptions, and limitations.

Research Design

A quantitative design was more suited for this study compared to a qualitative design because the purpose of the study was to verify and measure the existence of relationships between variables – something which qualitative studies do not indicate (Cozby & Bates, 2004). A correlation design is utilized to determine the direct relationship between the variables. In this study, the design allowed for testing for a linear relationship of each of the facets (reading habits and reading comprehension of participants) (Myers & Well, 2003). Thus, a correlation research design was more appropriate for the purpose of this study.

The study explored the reading comprehension of students as demonstrated by their proficiency scores on a standardized test (i.e., English II End of Course Exam (EOC)) in relation to their reading maturity, reading purpose, and reading interest scores. A non-experimental correlation research design was implemented, which allowed the researcher to determine whether there existed statistically significant positive or negative correlations between the independent variables (reading purpose, reading interest, and reading maturity) and the dependent variable of reading comprehension.

Population and Sample

The study's population included 11th grade students of the XYZ School District. Specifically, 11th grade XYZ high school students enrolled in an English/language arts class for the 2012-2013 academic year were studied as representative of the student population. From that group, students with archived data for both the Reading Maturity Survey and English II EOC results were drawn as the sample for this study.

Sampling Procedure

A cross sectional convenience-sampling plan was used to collect information for the study. This plan was used to select 11th grade students of XYZ high school. In convenience sampling, participants are selected based on ease-of-access, proximity, and willingness to participate in the study (Urdan, 2005). Hence, in the present study, 11th grade XYZ high school students enrolled in an English/language arts class for the 2012-2013 academic year were studied as representative of the student population. From that group, students with archived data for both the Reading Maturity Survey, and English II EOC results were drawn as the sample for this study. A potential limitation to convenience sampling is that the sample obtained for the study may not be representative of the entire population; however, if the convenience sample does not differ from the target population, then the convenience sampling plan is an acceptable way of selecting the participants for the study (Urdan, 2005). Given these reasons, the researcher did not need to randomly select a participant from the stated target population, as the number of students were limited based on the number enrolled in the 11th grade.

Instrumentation

The instrument used to measure the independent variables (i.e., reading interest, purpose for reading, and reading maturity scores) was the pre-existing survey developed by Thomas (2001), called the Reading Maturity Survey. The survey includes six measurement areas: reading attitudes, reading purpose, reading ability, reaction and use of ideas apprehended, kinds of material read, and personal adjustment to reading-transformational reading. Each question is answered on a five-point Likert-type scale (1 = not like me, 5 = a lot like me). A copy of the survey can be found in Appendix C. The survey responses provide information on whether or not the reader has a certain level of reading maturity. The purpose of reading and the reading interest subscales were also evaluated.

The reading comprehension scores were gathered through the MAP specifically on the English II EOC of participating students. The students from the population were asked to complete the MAP during the course of their education for academic year 2012-2013. MAP, a standard method to measure reading comprehension, is a series of tests that measure whether students in Missouri are meeting the Show-Me Standards. The MAP was created not only to assess knowledge, but also to measure how well a student can apply that knowledge to different situations (Missouri Department of Elementary and Secondary Education, 2013). The MAP uses three different types of questions, which include multiple multiple-choice questions, short-answer, and constructed-responses questions (Missouri Department of Elementary and Secondary Education, 2013). The English II EOC exam specifically assesses standards related to reading comprehension (Missouri Department of Elementary and Secondary Education, 2013). MAP specifically measures the reading ability of the student and its relation to comprehension. The MAP is widely used by schools because it has the support of the Missouri Department of Elementary and Secondary Education.

Measurement. All independent variables for the study were measured through a Likert-type scale survey, which means that all data for the variables were in interval form. As mentioned, Thomas' (2001) Reading Maturity Survey was used to gather data for the independent variables, namely reading interest, reading purpose, and reading maturity scores, which are rated according to a 5-point Likert-type scale. To measure the dependent variable, 10 items were added to derive the interest score and 10 items were added for the purpose score. The resulting 20 items were added together to derive the maturity score. This was then used as a reading maturity indication for each student, thereby reflecting an overall score for the English II EOC score.

Reliability and validity. This section involves the amount of reliability and validity that can be expected from the instruments used in the present study. The Reading Maturity Survey (Thomas, 2001) is a simple self-report survey instrument designed to assess reading maturity. The survey has six subcategories, one for each of the six elements of reading maturity. Thomas (2001), the developer of the survey, conducted several tests to ascertain the reliability and validity of the survey. Specifically,

split-half reliability was calculated in an earlier study conducted by Thomas (2001). The study included 82 college students who were asked to complete the survey. The results showed that the correlation between halves was .85 and when the Spearman-Brown formula was used to estimate the reliability coefficient for the whole instrument, it was .92.

It was necessary to check for the reliability of the measurement of maturity when only two subscales were used. The reliability of the Reading Maturity Survey was reported using Cronbach's alpha. Cronbach's alpha is often used when multiple questions in a survey or questionnaire form a scale and determining the internal consistency of the scale is desired. The Cronbach's alpha value for reading maturity was .957. A Cronbach's alpha value above .80 indicates strong evidence for reliability; therefore, there is strong evidence for a highly reliable scale (Carmines & Zeller, 1979).

The researcher has no evidence of the validity of the measurement of interest or purpose. It should be noted, however, reliability is a component of validity, and there is strong evidence that the Reading Maturity Survey is highly reliable.

Missouri's English II EOC assessment is designed to assess students' knowledge of Missouri's Course-Level Expectations (CLEs) and fulfill the requirements of No Child Left Behind. The reliability of English II EOC test scores was reported using Cronbach's alpha. The Cronbach's alpha value for Summer 2010 was .82. The Cronbach's value for Fall 2011 was .86. The Cronbach's value for Spring 2011 was .86 (Riverside, 2011). A Cronbach's alpha value above .70 indicates strong evidence for reliability; therefore, there is strong evidence for a highly reliable test.

The Outstanding Schools Act was passed in 1993. This Act required the Missouri State Board of Education to adopt rigorous academic performance standards that define the skills and competencies students need in order to successfully advance through the public school system, prepare for post-secondary education and the workforce, and become productive citizens. In 1996, the Missouri State Board of Education adopted a set of academic standards known as the Show-Me Standards. There are 73 standards that address application, communication, problem-solving, and responsible decision-making. There are 33 process standards that address the importance of engaging students in hands-on, active learning and integrating practical, challenging learning across all content areas. In addition, there are 40 standards that define the skills and knowledge that provide the foundation for learning in Communication Arts, Mathematics, Science, Social Studies, Fine Arts, and Physical Education. The content standards are the means by which students demonstrate proficiency in the broader process standards. In addition, Grade-Level Expectations (GLEs) assist school districts in articulating the standards across all grade levels and content areas. The Outstanding Schools Act of 1993 required development and implementation of a comprehensive assessment program to measure proficiency identified by the standards. Upon adoption of the academic standards in 1996, Missouri began developing the Missouri Assessment Program (MAP). In 2007, the Missouri State Board of Education approved a plan that replaced the MAP for high school students with the Missouri EOC to measure the proficiency in knowledge, skills, and competencies of high school students in English II, Algebra I, and Biology. DESE is required by federal law to ensure that scores from the EOC assessments measure student achievement in a reliable manner (Riverside, 2011).

Data Collection Procedures

Prior to implementation, this study underwent a thorough appraisal by the Baker University Institutional Review Board (IRB). The IRB committee approves all research studies involving human participants at institutions of higher learning. The researcher contacted the schools whose students were selected as participants in the study after IRB approval had been granted. The researcher also provided the XYZ School District with a cover letter that included the basic details of the study. A copy of the IRB and school district approval are attached as Appendix B.

Once the IRB and school district approval were secured, potential participants were contacted through a personal classroom visit by the researcher. All potential participants who agreed to take part in this study were required to complete the survey instrument utilized for this study. The participants were asked to sign an informed consent to ensure that they understood the full scope of this study. The survey invitations were hand delivered to every 11th grade XYZ high school student enrolled in an English/language arts class. All completed surveys were used as data for this research.

Furthermore, to collect the EOC scores, the researcher first secured permission to gather data from the Matrix data warehouse. Once approved, the researcher downloaded all the relevant information only; that is, the reading comprehension scores of the participants. No personal information was collected to preserve anonymity and confidentiality of the school records. However, individuals were identified with their responses by matching each student's individual alphanumeric code with test scores. The data of the participants were only available to the researcher.

Informed consent. Groenewald (2004) outlined the importance of informed consent for participants of research studies. The provision of informed consent allowed participants to contribute fully to the study and increased the likelihood of honest and open responses during the data collection survey process (Creswell, 2007). For this study, the participants were provided with a brief overview of the study and a provision for their voluntary participation in the study.

According to Groenewald (2004), the informed consent form should outline the study's purpose and the procedures of participant involvement in the data collection process so that the participants would be fully informed of the research in which they would be participating. Thus, participants were informed that although there would not be any remuneration for their participation, minimal risks existed in participating in the research. However, given this method, the participants would be contributing to a further understanding of the importance of reading to students and to people in general (Groenewald, 2004). The informed consent form contained information that described that the participation is voluntary, and that participants were entitled to stop the research at any time without risk of harm or repercussions (Groenewald, 2004). The procedures to protect confidentiality were also included in the information session (Groenewald, 2004).

Confidentiality. Confidentiality of the participants is an important consideration for the study. All participants were assured that their identities as participants remained anonymous. Anonymity of the participants within the text of the study was maintained using codes to identify the participants (Creswell, 2007). A coding system ensures that the participant identities are not disclosed and that the secrecy of data was ensured. Each participant was assigned a coded identifier (a letter and number combination, such as

"P1" indicating "Participant 1"), given according to the time they completed the survey questionnaires, and the coded identifier took the place of any personally identifying information gathered through the course of the research study. In the course of this study, only the researcher had access to the personal identifying information of the participants. The survey data was matched with the scores by finding the code secured in a personal computer.

Data Analysis and Hypothesis Testing

To address the objectives and to test the hypotheses of the study, descriptive statistics and correlation coefficients were calculated. The correlation coefficient was appropriate for the research because it indicates how two variables are related with one another. These analyses were conducted using the IBM® SPSS® Statistics Faculty Pack 22 for Windows.

The first part of the analyses for this study included the use of descriptive statistics. This was accomplished by collating responses, tabulating the frequencies of responses, and generating percentages. Mean scores, standard deviations, and sample sizes for continuous variables were computed.

The second part of the analyses involved the use of correlations that measured the strength and direction of the relationship between the variables under scrutiny (Moore & McCabe, 2004). The closer to -1, the coefficient could be said to describe a negative relationship, meaning that one variable increased as the other decreased (Moore & McCabe, 2004). When the coefficient is closer to +1, the relationship indicated is that whereas one variable increased, so did the other. When the coefficient approximates 0, then there is no relationship between variables (Moore & McCabe, 2004). Furthermore, *t*

tests were used to analyze the statistical significance of these correlations. A significance level of 0.05 was established.

Specifically, the four research questions were addressed to achieve the purpose of this quantitative research study. The research questions with their corresponding hypotheses are as follows:

RQ1. What are the reading maturity, reading interest, reading purpose, and reading comprehension scores, as measured by the Missouri Assessment Program (MAP), of the sampled high school students in the XYZ School District?

This research question was analyzed using the tabulation and analysis of measured variables. Mean scores, standard deviations, and sample sizes were computed and analyzed.

RQ2. To what extent is there a statistically significant relationship between the reading interest and reading comprehension of the high school students in the XYZ School District?

 H_02 : There is no significant positive relationship between reading interests and reading comprehension scores.

In order to analyze the relationship between reading interests and reading comprehension, the researcher calculated a Pearson's product moment correlation coefficient. The Pearson's product correlation coefficient was used to determine the direction and the strength of the relationship between reading interests and reading comprehension. A one sample t test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05.

RQ3. To what extent is there a statistically significant relationship between reading purpose and reading comprehension of the high school students in the XYZ School District?

 H_03 : There is no significant positive relationship between reading purpose and reading comprehension scores.

In order to analyze the relationship between reading purpose and reading comprehension, the researcher calculated a Pearson's product moment correlation coefficient. The Pearson's product correlation coefficient was used to determine the direction and the strength of the relationship between reading purpose and reading comprehension. A one sample t test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05.

RQ4. To what extent is there a statistically significant relationship between reading maturity and reading comprehension of the high school students in the XYZ School District?

 H_04 : There is no significant positive relationship between reading maturity and reading comprehension scores.

In order to analyze the relationship between reading maturity and reading comprehension, the researcher calculated a Pearson's product moment correlation coefficient. The Pearson's product correlation coefficient was used to determine the direction and the strength of the relationship between reading maturity and reading comprehension. A one sample t test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05.

Limitations

Limitations are factors that limit the study, such as weaknesses, problems, and reservations, which are outside the control of the researcher but may affect the results. The test scores might have also been affected by the support students received from their own families. All participants in the study participated voluntarily and completed all survey items honestly and accurately. This is one of the assumptions in this study. However, in self-report measures such as these, a risk exists regarding the honesty of the participants in answering surveys. Hence, the honesty of the answers of the participants could have limited measurement and quantification of relationships between the variables. Furthermore, the validity of this quantitative correlation study was limited to the reliability of the instruments used to gather, analyze, and interpret research data. Before findings can be made, reliability and validity were also considered so as they remained accurate.

Summary

Chapter three outlined the methodology for the proposed study. The chosen research method and design was quantitative, which was determined to be superior for the exploratory intent of this study (Creswell, 2007). The Reading Maturity Survey and the MAP scores of students were used to capture the variables considered in this study. Descriptive statistics and correlation analysis were used to answer the research questions posed for this study. Chapter four includes a detailed presentation of the data.

Chapter Four

Results

The previous chapters explained the background of this study, reviewed relevant literature to the study, and identified the methodology of this study. Chapter four presents detailed statistics that were obtained by following the methodology presented in chapter three as they relate to the research questions for this study. This quantitative study was completed for the purpose of examining the correlation, if any, between reading comprehension and reading purpose, reading interest, and reading maturity. Reading comprehension was measured using proficiency scores on a standardized test of English II EOC. The sample selected for the study consisted of 11th grade students of the XYZ School District.

Descriptive Statistics

RQ1. What are the reading maturity, reading interest, reading purpose, and reading comprehension scores, as measured by the Missouri Assessment Program (MAP), of the sampled high school students in the XYZ School District?

Descriptive statistics were obtained to address Research Question 1, which was to determine the reading maturity, reading interest, reading purpose, and reading comprehension scores, as measured by the MAP, of the sampled high school students in the XYZ School District. Table 5 summarizes the descriptive statistics calculated using the continuous variables of reading interest, reading purpose, reading maturity, and reading comprehension as measured by the English II EOC Proficiency Level (EOC). The descriptive statistics include the mean and standard deviation. The mean score for reading interest was 30.39 (SD = 10.59) on a scale of 10 to 50. The mean score for

reading purpose was 29.88 (SD = 9.64) on a survey scale of 10 to 50. The mean score for reading maturity was 60.26 (SD = 19.55) on a survey scale of 20 to 100. The mean score for English II EOC proficiency level was 203.41 (SD = 16.86) on a scale score of 100 to 250. The mean score of each measurement: reading interest; reading purpose; reading maturity; and reading comprehension was in the upper half of the scale.

Table 5

Descriptive Statistics for Reading Interest, Reading Purpose, Reading Maturity, and English II EOC Scores

| Facet of Reading | Ν | Min | Max | Mean | SD |
|-----------------------------|-----|-----|-----|-------|-------|
| Reading Interest | 224 | 10 | 50 | 30.39 | 10.59 |
| Reading Purpose | 224 | 11 | 48 | 29.88 | 9.64 |
| Reading Maturity | 224 | 23 | 97 | 60.26 | 19.55 |
| Reading Comprehension (EOC) | 224 | 138 | 250 | 203.4 | 16.86 |

The summary of the level of English II EOC scores among the 224 students is shown in Table 6. Frequency and percentage summary were conducted because the data are categorical. In terms of the English II EOC proficiency level among the 224 students, almost half (49.1%) or 110 of the 224 students achieved proficient levels, 70 (31.3%) had basic levels, 29 (12.9%) had advanced levels, while there were only very few (6.7%) or 15 out of the 224 students who had below basic levels of English II EOC proficiency.

Table 6

| Proficiency Level | Frequency | Percent |
|-------------------|-----------|---------|
| Advanced | 29 | 12.9 |
| Proficient | 110 | 49.1 |
| Basic | 70 | 31.3 |
| Below Basic | 15 | 6.7 |
| Total | 224 | 100.0 |

Frequency and Percentage Summary of English II EOC Proficiency Level

Hypothesis Testing

Three hypotheses were proposed one for Research Question 2, 3, and 4. Each hypothesis is stated below with the question it addresses along with the results of the calculation of the correlation coefficient and the hypothesis test for the significance of the correlation.

RQ2. To what extent is there a statistically significant relationship between the reading interest and reading comprehension of the high school students in the XYZ School District?

 H_02 : There is no significant positive relationship between reading interests and reading comprehension scores.

A Pearson product moment correlation coefficient was calculated to index the strength and direction of the relationship between reading interests and reading comprehension scores. A one sample *t* test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05. The correlation coefficient (r = 0.43) provided evidence for a moderately strong positive

relationship between reading interest and reading comprehension. The results of the one sample *t* test indicated a statistically significant relationship between reading interest and reading comprehension, df = 222, p < 0.001. As the reading interest of the 11th grade students becomes more positive or higher, their reading comprehension, as measured by the English II EOC scores, tends to increase. With these results, the null hypothesis for Research Question 2 was rejected, as the results showed significant correlation.

RQ3. To what extent is there a statistically significant relationship between reading purpose and reading comprehension of the high school students in the XYZ School District?

 H_03 : There is no significant positive relationship between reading purpose and reading comprehension scores.

A Pearson product moment correlation coefficient was calculated to index the strength and direction of the relationship between reading purpose and reading comprehension scores. A one sample *t* test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05. The correlation coefficient (r = 0.44) provided evidence for a moderately strong positive relationship between reading purpose and reading comprehension. The results of the one sample *t* test indicated a statistically significant relationship between reading purpose and reading purpose of the 11th grade students is higher, their reading comprehension, as measured by the English II EOC scores, tends to increase. With these results, the null hypothesis for Research Question 3 was rejected, as the results showed significant correlation.

RQ4. To what extent is there a statistically significant relationship between reading maturity and reading comprehension of the high school students in the XYZ School District?

 H_04 : There is no significant positive relationship between reading maturity and reading comprehension scores.

A Pearson product moment correlation coefficient was calculated to index the strength and direction of the relationship between reading maturity and reading comprehension scores. A one sample *t* test was conducted to test for the statistical significance of the correlation coefficient. The level of significance was set at .05. The correlation coefficient (r = 0.45) provided evidence for a moderately strong positive relationship between reading maturity and reading comprehension. The results of the one sample *t* test indicated a statistically significant relationship between reading maturity and reading maturity of the 11th grade students is higher, their reading comprehension, as measured by the English II EOC scores, tends to increase. With these results, the null hypothesis for Research Question 4 was rejected, as the correlation results showed significant correlation.

Summary

This chapter presented results, the calculations of the correlations, and the hypothesis tests conducted to test for their statistical significance used to address the four research questions associated with this study. The results were generated through the SPSS statistical software. Results of the hypothesis testing showed a moderately strong positive significant relationship between the 11th grade students' reading comprehension and their reading interest, reading purpose, and reading maturity. Chapter five contains

Chapter Five

Interpretation and Recommendations

The purpose of this research was to determine the correlation, if there is any, between reading comprehension with reading purpose, reading interests, and reading maturity. Chapter five provides a brief overview of the main points of chapters one through four, as well as the findings related to literature, the recommendations for actions, and the implications for future studies.

Study Summary

This was a quantitative study that examined the relationship between reading comprehension with reading purpose, reading interests, and reading maturity. This section contains an overview of the problem, the purpose statement and research questions, and a review of the methodology.

Overview of the Problem. Reading has shaped humanity and its civilizations in many ways (Quay & Watling, 2009). Furthermore, researchers such as Paul (1993) and Guthrie et al. (1996) have indicated that reading has significant consequences on the cognitive development of individuals and their ability to comprehend what they read. This means that without the skill of reading, individuals risk experiencing serious disadvantages in their daily cognitive functions.

The current study was rooted in the findings about reading comprehension established by Adler (1940), and developed by subsequent researchers like Biancarosa and Snow (2004) and Gray (1951). Gray (1951) noted that reading is comprised of not just deciphering symbols, but making meaning based on these symbols, and applying these meanings to the expansion of personal knowledge. Within such a process, reading comprehension takes place when the reader deciphers and understands meanings from written text. According to Gray and Rogers (1956), the process of reading comprehension involves understanding what has been read and can be measured by the amount of understanding a reader has after being exposed to a given text.

This concept of reading comprehension is also related to the concept of reading maturity first investigated by Gray and Rogers (1956). Reading maturity involves the capability of a reader to extract information and insight from texts and apply them in different situations. It involves the ability to think critically regarding information and decide how it may be applied or used (Gray & Rogers, 1956; Manzo & Manzo, 1993). Thus, as reflected by Manzo and Manzo (1993), readers who are more mature have more advanced levels of reading comprehension and a greater capacity for critical application of what they have comprehended.

According to Murnane et al. (2012), the 21st century presents greater demands on the reading comprehension skills of American youth. Because of increased competition the world over, American children must now exhibit reading skills of a higher caliber compared to their counterparts from years past. However, according to the scholars, most views regarding reading instruction overemphasize the value of lower-level skills such as speed in reading, summarizing, and memorizing details. What should be used are more holistic approaches to comprehension and complex thought (Manzo & Manzo, 1993; Thomas, 2001). As a result, there has been little or no information available on the outcomes of critical facets of reading and their relationships with reading comprehension. Thus, researchers and educators alike do not have the necessary knowledge regarding the kinds of reading habits required to develop deeper reading comprehension. The existing literature has instead been focused on studies measuring comprehension, in lieu of endeavors that seek to develop and understand the skills and habits needed to deepen reading comprehension (Biancarosa & Snow, 2004; Carver, 2000a).

Purpose Statement and Research Questions. The purpose of this research was to determine the nature of the relationship between reading comprehension and each of the following: reading interest, reading purpose and reading maturity. Four research questions were posed to achieve the purpose of this quantitative research study. The research questions revolved around the measurements of reading maturity, reading interest, reading purpose and reading maturity, reading interest, reading purpose and reading comprehension.

Review of the Methodology. A quantitative correlation design was implemented for this study, which was deemed more suited as compared to a qualitative one because the purpose of the study was to verify and measure the existence of relationships between variables – something which qualitative studies cannot do (Cozby & Bates, 2004). A correlation design allows for the determination of the direct relationship between the variables. The study's sample included the 11th grade students of the XYZ School District. The measurement instrument that was used to measure the independent variables (i.e., reading interest, purpose for reading, and reading maturity scores) was part of the pre-existing survey developed by Thomas (2001), called the Reading Maturity Survey. The reading comprehension scores were gathered through the MAP, specifically on the English II End of Course Exam (EOC) of participating students. Students from the sample were asked to complete the MAP during the course of their education for academic year 2012-2013. The researcher accessed this data for the purposes of the present study.

Major Findings

To address the first research question, descriptive statistics were obtained to determine the reading maturity, reading interest, reading purpose, and reading comprehension scores, as measured by the MAP, of the sampled high school students in the XYZ School District. In particular, the descriptive statistics represented the continuously measured study variables of reading interest, reading purpose, reading maturity, and reading comprehension as measured by the English II EOC Proficiency Level (EOC) among the 224 students. It was found that in terms of the English II EOC proficiency level among the 224 students, 49.1% had proficient levels, 31.3% had basic levels, 12.9% had advance levels, while there were only 6.7% who had below basic levels. While the mean score of each measurement: reading interest; reading purpose; reading maturity; and reading comprehension was in the upper half of the scale, these scores are relatively low considering the potential instructional support of a high school classroom. These results illustrate Thomas' (2001) notion that current reading instruction may overemphasize the value of lower-level skills.

To address Research Questions 2, 3, and 4, Pearson product moment correlation coefficient were calculated to determine the relationships among the variables of reading interest, reading purpose, reading maturity, and reading comprehension as measured by the English II EOC proficiency level. The result of the calculation of the correlation coefficients provided evidence for a moderately strong positive relationship between reading comprehension and reading interest; between reading comprehension and reading purpose; and between reading comprehension and reading maturity. Moreover, the results of the Pearson product moment correlation coefficient test indicated a statistically significant relationship between reading comprehension and each of the variables reading maturity, reading interest, and reading purpose.

As the reading interest, reading purpose, and reading maturity of the 11th grade students increased, their reading comprehension, as measured by the English II EOC proficiency levels, also increased. With these results, the null hypotheses for Research Questions 2, 3, and 4 were rejected, as the results showed significant positive correlations.

Findings Related to the Literature

As to the first research question, the current work has indicated that almost half (49.1%) or 110 out of the 224 students had proficient levels, 70 (31.3%) had basic levels, 29 (12.9%) had advance levels, while there were only very few (6.7%) or 15 out of the 224 students who had below basic levels. This finding supports Murnane et al. (2012), who asserted that the 21st century presents greater demands on the reading comprehension skills of American youth. Moreover, the literature provides that what should be used are more holistic approaches to comprehension and complex thought (Manzo & Manzo, 1993; Thomas, 2001).

In answer to the second research question, this study has found a significant positive relationship was found between the reading interest and reading comprehension of the sample. This means that as students' reading interest increases, students' reading comprehension also increases. This finding supports the assertions of Miranda et al. (2011) as they noted that several studies have shown evidence supporting the hypothesis that reading interest and engagement are the key factors that determine reading comprehension. In other words, when individuals are more interested in reading, they
become more successful readers, as measured by their reading speed, their comprehension, and the quality of their vocabulary. It also supports the results of Thomas (2001), who linked several facets of reading such as reading interest, reading purpose, and reading maturity that seem to be integral to reading comprehension and cognitive development.

Pertaining to the third research question, this study found a significant positive relationship between reading purpose and reading comprehension of the sample. As student purpose for reading improved, reading comprehension increased. This is congruent with the observation of Linderholm et al. (2008), who emphasized that significant findings have established the importance of reading purpose to comprehension and reading success. Linderholm et al. (2008) hypothesized that reading comprehension and reading success were functions of reading purpose that could be mediated by individual differences in specific skills and capacities pertinent to reading. The researchers were arguing that if readers did not have the necessary skills to succeed at a particular reading purpose, then they would not be able to achieve their reading goals or to comprehend the materials in the context of their goals. In other words, for Linderholm et al. (2008) and the current work, reading purpose is a strong predictor of reading success or comprehension. This finding also supports the study conducted by Thomas (2001), who investigated several facets of reading such as reading interest, reading purpose, and reading maturity that seem to be integral to reading comprehension and cognitive development.

As an answer to the fourth and final research question, this study found a significant positive relationship between the reading maturity and reading comprehension

64

of the sample. This means that as students' reading maturity increases, students' reading comprehension also increases and thus the null hypothesis is rejected. This finding is similar to that of Manzo and Manzo (1993), who found that readers who are more mature have more advanced levels of reading comprehension and a greater capacity for critical application of what they have comprehended. In addition, this finding was also the driving force in a pursuit for reading maturity, just as much as it would be for fundamental reading comprehension and efficacy (Biancarosa & Snow, 2004; Thomas, 2001). Furthermore, Theiss et al. (2009) also highlighted that mature readers are better able to grasp meanings that are not literal from their reading materials. In effect, therefore, Theiss et al. (2009) noted that when mature readers understand moods and feelings within the written material, they also use the information to inform their experience and knowledge outside the reading the written work. Simply put, the level of maturity determines the level of reading comprehension. Finally, results of this study supports Thomas (2001), whose research linked reading interest, reading purpose, and reading maturity. These results support that interest, purpose, and maturity are integral to reading comprehension and cognitive development.

Conclusions

The final section of chapter five gives closure to the study. The researcher identifies implications for action based upon the major findings of the study. Additionally, suggestions for future research and concluding remarks are provided. **Implications for Action.** Having obtained the aforementioned results, the main implication is for secondary learning institutions in the United States, private or public, to devise an innovative curriculum to develop student reading comprehension considering the reading purpose, reading interest, and reading maturity as found by the current study and supported by the existing literature to influence the former positively. This will not only help the students individually, but also socially. For example, when a higher level of reading comprehension is developed in them; they will be more likely to be contributing to social development in terms of academic advancement. Concerning their academic success or failure, increasing their level of reading comprehension by considering reading interest, reading purpose, and reading maturity would increase the former and decrease the latter.

Given this implication, policymakers, especially in the education enterprise, should devise a more rigid consideration of the determining factors that students should possess in the United States in terms of their reading comprehension development, and create programs that will ensure those factors are addressed as they are found to influence students' reading comprehension level positively.

The findings of this study also have important implications for the personal development of students. Given the importance of reading skills and comprehension in developing different aspects of the cognition of individuals, developing higher levels of reading comprehension among individuals will have significant effects on their personal capacities. Such capacities, when developed, will have significant impacts on the lives of individuals, and the future opportunities that can be accessible to them by virtue of their developed skills.

Recommendations for Future Research. Because of the limitations thus identified, it would be insightful for future researchers to consider the following recommendations:

- Consider expanding the topic discussed in this study. As it could be noticed, only the three factors, namely reading interest, reading purpose, and reading maturity, have been explored in relation to student reading comprehension level. Considering other external factors of the reading comprehension development process, such as the materials used for reading and the environment wherein reading is done, would certainly contribute more to the field of literacy research.
- 2. Change, if not widen, the scope of the participants. In this study, only 11th grade students of the XYZ School District were considered. While an increase in the number of population sampled would contribute largely in the exploration of the reading comprehension phenomenon, changing the grade level of the participants might also yield positive effect on the study.
- Consider the other demographic information of the participants. For one, age might influence outcomes. For another, location of participants could be changed. These two changes would make the findings of the study more generalizable.
- 4. Lastly, identifying gender, socioeconomic status, race, and ethnicity of participants could better inform results of the study.

Concluding Remarks

This study found a positive significant relationship between reading comprehension and reading interest; reading comprehension and reading purpose; as well as reading comprehension and reading maturity. As each of these factors increases, the level of student reading comprehension increases. These factors are positive indicators of reading success or reading comprehension. They influence student reading comprehension in a positive manner. These findings were found to be supported by the existing literature on the subject being studied. In other words, the previous studies also supported the finding that each of the factors hereby explored are determinant of reading comprehension level through a positive relation.

Given these results, implications for positive and social changes were generated. In particular, programs and curriculum related to the issue at hand were recommended. It was also argued that with these findings, both the society and educational enterprise may benefit. Research is recommended to expand the topic and the participants for a deeper comprehension of the phenomenon being studied.

References

- Adetoro, N. (2010). Reading interest and information needs of persons with visual impairment in Nigeria. *South African Journal of Libraries and Information Science*, *76*(1), 49-56. Retrieved from http://sajlis.journals.ac.za/pub/article/view/85/77
- Adler, M. J. (1940). *How to read a book: The art of getting a liberal education*. New York, NY: Simon & Schuster.
- Biancarosa, G., & Snow, C. E. (2004). Reading next A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York.
 Washington, DC: Alliance for Excellent Education.
- Bloom, H. (2000). How to read and why. New York, NY: Scribner.
- Brooks, R. (1971). An investigation of the relationship between reading interest and *comprehension* (Unpublished doctoral dissertation). Ohio State University, OH.
- Carmines, Edward G. & Zeller, Richard A. (1979). *Reliability and validity assessment* (*Quantitative applications in the social sciences*) (Kindle Locations 414-417).Kindle Edition. See APA example 19 on p. 203.
- Carver, R. P. (1982). Optimal rate of reading prose. *Reading Research Quarterly*, *18*(1), 56-88.
- Carver, R. P. (2000a). *The causes of high and low reading achievement*. Mahwah, NJ: Erlbaum.
- Carver, R. P. (2000b). *Technical manual for the Accuracy Level Test*. Kansas City, MO: Revrac Publications.

- Casale, U. P. (1982). Small group approach to the further validation and refinement of a battery for assessing 'progress toward reading maturity' (Unpublished Doctoral dissertation). University of Missouri at Kansas City.
- Chall, J. S., & Jacobs, V. A. (2003). Poor children's fourth-grade slump. *American Educator*, 27(1), 14-17.
- Chase, F. (1961). Demand on the reader in the next decade. *Supplementary Educational Monographs*, *91*, 7-18.
- Cozby, P. C., & Bates, S. (2004). *Methods in behavioral research*. New York, NY: McGraw Hill.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Crosby, R. (2013). Reading attitudes as a predictor of Latino adolescents' reading comprehension (Unpublished doctoral dissertation). University of California, Riverside, CA.
- Eisner, E. (2005). Back to whole. *Educational Leadership*, 63(1), 14-18.
- Gray, W. S. (1951). Promoting growth toward maturity in interpreting what is read.*Proceedings of the Annual Conference on Reading* (p. 74). Chicago, IL:University of Chicago Press.
- Gray, W. S., & Rogers, B. (1956). *Maturity in reading: Its nature and appraisal*.Chicago, IL: University of Chicago Press.
- Gregory, G. H., & Kuzmich, L. (Eds.). (2005). Differentiated literacy strategies for student growth and achievement in grades 7-12. Thousand Oaks, CA: Corwin Press.

- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, *3*(1), 1-25.
- Guthrie, J. T., McGough, K., Bennett, L., & Rice, M. E. (1996). Concept-oriented instruction: An integrated curriculum to develop motivations and strategies for reading. In L. Baker, P. Afflerbach, & D. Reinking (Eds.), *Developing engaged readers in school and home communities* (pp. 165-190). Mahwah, NJ: Erlbaum.
- Henk, W. (1988). Effects of top-level comparison-contrast text structures on reading comprehension performance. *Reading Research and Instruction*, 28(1), 1-17.
- Hirsch, E. D., Kett, J. F., & Trefil, J. S. (1988). Cultural literacy: What every American needs to know. New York, NY: Vintage Books.
- Iyengar, S. (2007). *To read or not to read: A question of national consequence*.Washington, DC: National Endowment for the Arts.
- Kirsch, I. (2001). *The International Adult Literacy Survey (IALS): Understanding what was measured*. Princeton, NJ: Educational Testing Service.
- Kutner, M., Greenberg, E., Jin, Y., Boyle, B., Hsu, Y, & Dunleavy, E. (2007). Literacy in everyday life: Results from the 2003 National Assessment of Adult Literacy.
 Retrieved from http://nces.ed.gov/Pubs2007/2007480.pdf
- Lengyel, .E. (2010). *The motivational factors that affect adolescent readers' comprehension* (Unpublished doctoral dissertation). St. Joseph's University, PA.
- Linderholm, T. (2006). Reading with purpose. *Journal of College Reading and Learning*, *36*, 70-80.

- Linderholm, T., Cong, X., & Zhao, Q. (2008). Differences in low and high working memory capacity readers' cognitive and metacognitive processing patterns as a function of reading for different purposes. *Reading Psychology*, 29(1), 69-85. doi:10.1080/02702710701568587
- Linderholm, T., & Wilde, A. (2010). College students' beliefs about comprehension when reading for different purposes. *Journal of College Reading and Learning*, 40, 7-19.
- Manzo, A. V., & Casale, U. P. (1981). A multivariate analysis of principle and trace elements in mature reading comprehension. In G. H. McNinch (Ed.), *Comprehension: process and product. First yearbook of the American Reading Forum* (pp. 29-36). Athens, GA: American Reading Forum.
- Manzo, A. V., & Casale, U. P. (1983a). Description and factor analysis of a broad spectrum battery for assessing "progress toward reading maturity." In G. H.
 McNinch (Ed.), *Reading research to reading practice. Online yearbook of the American Reading Forum, Vol. 3* (pp. 100-105). Athens, GA: American Reading Forum.
- Manzo, A. V., & Casale, U. P. (1983b). A preliminary description and factor analysis of a broad spectrum battery for assessing "progress toward reading maturity." *Reading Psychology*, 4(2), 181-191.
- Manzo, A. V., & Manzo, U. C. (1993). Literacy disorders: Holistic diagnosis and remediation. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.

- Manzo, A. V., Manzo, U. C., Barnhill, A., & Thomas, M. (2000). Proficient reader subtypes: Implications for literacy theory, assessment, and practice. *Reading Psychology*, 21(3), 217-232.
- Mar, R., Oatley, K., & Petterson, J. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes. *Communications*, 34, 407-428. doi:10.1515/COMM.2009.025

McGuinness, C. (1998). Reading reflex. New York, NY: Fireside.

Mercer, N. (2000). *Words and minds: How we use language to think together*. London, United Kingdom: Routledge.

Miranda, T., Williams-Ross, D., Johnson, K., & McKenzie, N. (2011). Reluctant readers in middle school: Successful engagement with text using the e-reader. *International Journal of Applied Science and Technology*, 1(6), 81-91. Retrieved from http://www.ijastnet.com/journals/Vol_1_No_6_November_2011/9.pdf

- Missouri Department of Elementary and Secondary Education. (2013). MAP-A 2014-2015 instructor's guide and implementation manual. Retrieved from http://dese.mo.gov/sites/default/files/MAPA_2014-2015_Instructor's%20Guide_and_Implementation_Manual.pdf
- Moore, D. S., & McCabe, G. P. (2004). *Introduction to the practice of statistics*. New York, NY: W. H. Freeman.

Murnane, R., Sawhill, I., & Snow, C. (2012). Literacy challenges for children in the 21st century: Introducing the issue. Retrieved from http://futureofchildren.org/futureofchildren/publications/docs/22_02_FullJournal. pdf

- Myers, J. L., & Well, A. (2003). *Research design and statistical analysis*. Mahwah, NJ: Psychology Press.
- Paul, R. W. (1993). Critical thinking: What every person needs to survive in a rapidly changing world (3rd ed.). Santa Rosa, CA: Foundation for Critical Thinking.
- Powell-Brown, A. (2003). Can you be a teacher of literacy if you don't love to read? Journal of Adolescent & Adult Literacy, 47(4), 284-288.
- Quay, S., & Watling, G. (2009). Cultural history of reading. Westport, CT: Greenwood.
- Riverside Publishing Company. (2011). *Missouri End-of-Course Assessments technical* report 2010-2011.
- Sadoski, M. (2004). *Conceptual foundations of teaching reading*. New York, NY: Guilford Press.
- Sticht, T. G. (1972). Learning by listening. In V. H. Winston (Ed.), Language comprehension and the acquisition of knowledge (pp. 285-314). New York, NY: Wiley Press.
- Theiss, D., Philbrick, A., & Jarman, G. (2009). Using the reading maturity survey in teacher education program evaluation. Southeast Regional Association of Teacher Educators SRATE Journal, 18(1), 59-63. Retrieved from http://files.eric.ed.gov/fulltext/EJ948670.pdf

Thomas, M. M. (2001). Proficient reader characteristics: Relationships among textdependent and higher-order literacy variables with reference to stage theories of intellectual development (Order No. 3010626). Available from ProQuest Dissertations & Theses Full Text. (304706119). Retrieved from http://search.proquest.com/docview/304706119?accountid=6143 Tobing, I. (2013). *The relationship of reading strategies and self-efficacy with the reading comprehension of high school students in Indonesia* (Unpublished doctoral dissertation). University of Kansas, Lawrence, KS.

Urdan, T. C. (2005). Statistics in plain English, Mahwah, NJ: Erlbaum.

Appendices

Appendix A: IRB Request



Date: June 11, 2014

IRB PROTOCOL NUMBER ______(IRB USE ONLY)

IRB REQUEST Proposal for Research Submitted to the Baker University Institutional Review Board

I. Research Investigator(s) (Students must list faculty sponsor first)

| Department(s) | School of Education Graduate De | partment | | |
|--|---------------------------------|-----------------------------|--|--|
| Name | Signature | | | |
| 1. Harold Frye | Tenslats me | Major Advisor | | |
| 2. Margaret Waterman | Manfulate | Research Analyst | | |
| 3. | | University Committee Member | | |
| 4. | | External Committee Member | | |
| Principal Investigator: <u>Scot Squires</u> Phone: 816-977-8752 Email: <u>scotsqui@gmail.com</u> scot_squires@isdschools.org Mailing address: 5017 Walnut, KCMO 64112 | | | | |
| Faculty sponsor: Harol | d Frye | | | |

Faculty sponsor: Harold Frye Phone: 913-344-1220 Email: Harold.Frye@bakeru.edu

Expected Category of Review: X Exempt Expedited Full

II: Protocol: (Type the title of your study)

The Effect of Reading Habits on Reading Maturity

Summary

In a sentence or two, please describe the background and purpose of the research.

The purpose of this study is to achieve a deeper appreciation and understanding of how different facets of reading affect reading comprehension scores in students. The results of this study are relevant to the XYZ School District and the field of literacy instruction as educational practitioners improve learning by directly teaching increasingly complex skills/concepts while nurturing a love for varied, purposeful reading. The results of this study will help educational leaders understand a comprehensive profile of the mature reader – one who demonstrates proficiency in reading comprehension on standardized tests and also demonstrates a passion for varied, purposeful reading.

Briefly describe each condition or manipulation to be included within the study.

There will be no conditions or manipulations because the study is correlational.

What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy. Will the subjects encounter the risk of psychological, social, physical or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.

Archived data from a district initiative will be used. The district data included:

- A two page pre-existing Reading Maturity survey (attached) to 11th grade students in the XYZ School District. Eleventh grade ELA classrooms were visited to explain and administer the survey, which took approximately ten minutes to complete. Classrooms were visited on a day convenient for teachers, minimizing disruption to planned learning experiences. Teachers were informed regarding this district initiative.
- Obtaining 2012-13 English II EOC results for participating students. I will use Matrix Data Warehouse to pair participating student survey results with English II EOC results. Subjects of this study will be made anonymous once EOC data and survey results are paired.

There is no psychological, social, physical or legal risk to subjects of the study as data is archived.

Will any stress to subjects be involved? If so, please describe.

There will be no significant stress to subjects of this study as data is archived.

Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.

Subjects of this study will not be deceived in any way.

Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.

The pre-existing Reading Maturity documents information about personal reading habits of the subject. Standardized test scores will be paired with survey results for each subject. Results will be made anonymous by the use of a numbering system.

Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.

Subjects will not be presented with offensive, threatening, or degrading materials.

Approximately how much time will be demanded of each subject?

No time will be demanded of subjects of this study as data is archived.

Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.

11th grade students in the XYZ School District will be the subjects in this study. All students present on the day of the survey administration and the day of MAP testing will be included.

What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?

Archived data will be accessed for this study.

How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.

Archived data will be accessed for this study.

Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.

No aspect of the data will be part of permanent record that can be identified with the subject.

Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? If so, explain.

Supervisor, teacher, and/or employer will not be aware of subject participation. There will be no permanent record made available to anyone other than the researcher of whether or not a subject participated in this study.

What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with it after the study is completed?

A coding system ensures that the participant identities will not be disclosed. Each participant will be assigned a coded identifier (a letter and number combination, e.g. "P1" indicating "Participant 1"), and the coded identifier takes the place of any personally identifying information gathered through the course of the research study.

All data materials for the study, physical and electronic will be deleted or destroyed per district policy within seven years after the study has been completed. Physical records will be destroyed by shredding and electronic records will be deleted from the computer's hard drive.

If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?

There are no risks involved in the study.

Will any data from files or archival data be used? If so, please describe.

Reading Maturity survey results and English II EOC will be obtained from archived data.

Appendix B: Approvals



August 27, 2014

Dear Scot Squires and Dr. Frye,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

- 1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
- 2. Notify the IRB about any new investigators not named in original application.
- 3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
- 4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
- If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at CTodden@BakerU.edu or 785.594.8440.

Sincerely,

Chris Todden EdD Chair, Baker University IRB

Baker University IRB Committee Verneda Edwards EdD Sara Crump PhD Molly Anderson Scott Crenshaw From: Sent: Sunday, April 20, 2014 6:57 PM To: Scot Squires Cc: Subject: Re: Squires Reading Maturity Study -

Scot-

This study is so good and incredibly relevant to our work as a district. I will be excited to learn what the data tells you about this group of students and even more excited to discuss an action plan based on these results!

From: Sent: Friday, April 18, 2014 4:24 PM To: Scot Squires Senter Study - Stu

Approved! I am pleased to hear about your progress. Keep plugging away!

From: Scot Squires Sent: Tuesday, April 15, 2014 12:41 PM To: Subject: Squires Reading Maturity Study -

I'm taking another step toward completion of the Baker University EdD program. My study in Reading Maturity explores relationships between reading habits/attitudes and standardized test scores of high school students.

The first three chapters of this study have been approved by my Baker University advisor, Dr. Harold Frye. I'm now seeking your approval to proceed with the next phase of this study using student data.

Data collection for this study includes:

Administering a two page Reading Maturity survey (attached) to 11th grade students at
 I will personally visit 11th grade ELA classrooms of

to explain and administer the survey, which takes approximately 10 minutes to complete. I will visit classrooms on a day convenient for teachers, minimizing disruption to planned learning experiences.

- Obtaining 2012-13 English II EOC results for participating students. I will use Matrix to pair
 participating student survey results with English II EOC results. Subjects of this study will be made
 anonymous once EOC data and survey results are paired.
- Analyzing data. I will use this anonymous data to identify relationships between reading comprehension, reading interest and purpose for reading.

Results of this study are relevant to the Independence School District and the field of literacy instruction as we improve learning conditions by directly teaching increasingly complex skills/concepts while nurturing a love for varied, purposeful reading. The results of this study will help us understand a comprehensive profile of the mature reader – one who demonstrates proficiency in reading comprehension on standardized tests and also demonstrates a passion for varied, purposeful reading.

If you approve, I will contact

to explain and administer the two page Reading Maturity survey to 11th grade students.

Thank you!

Scot Squires

Appendix C: Reading Maturity Survey

The Reading Maturity Survey

| Name/ID: Age: Date | e: |
|--------------------|----|
|--------------------|----|

Directions: Please rate/characterize yourself as a reader on each item. Use the five point scale where one (1) is the lowest and five (5) is the highest.

Section 1

| 1. I enjoy reading. <i>not like me</i> 1 | 2 | somewhat like me 3 | 4 | a lot like me 5 |
|--|------------|---------------------------|----------------|--------------------|
| A 11 | • | 57 | | |
| 2. I have a high inter- not like me | est in rea | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 5 |
| | ~ | 5 | | 5 |
| 3. I feel that reading | can be e | | | |
| not like me | | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 |
| 4. Reading can be sti | mulating | T | | |
| not like me | mulating | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 |
| | | 17 | | |
| 5. Reading is an impo | ortant pa | rt of my life. | | |
| not like me | | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 |
| 6. I read frequently. | | | | |
| not like me | | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 s |
| | 1 | ಸ್ಟ | 64 9 11 | 5 |
| 7. I have a wide varie | ety (or bi | eadth) of reading interes | ts. | |
| not like me | | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 |
| 0.111 | | · CC | | |
| 8. I like to read about | many d | | | - 1-+ 1:1 |
| not like me 1 | 2 | somewhat like me 3 | 4 | a lot like me 5 |
| 1 | 2 | 3 | 4 | 5 |
| 9. I read extensively | on certai | n topics (or with depth). | | |
| not like me | | somewhat like me | | a lot like me |
| 1 | 2 | 3 | 4 | 5 |
| | u | | | |
| | learn a | lot about something that | interest | |
| not like me | | somewhat like me | | a lot like me |

not like mesomewhat like mea lot like me1234

Section 2

| 1. I feel that I read for v not like me 1 | valuable 2 | reasons. somewhat like me 3 | 4 | a lot like me 5 |
|---|-----------------|--|-----------------|----------------------------------|
| 2. One of the reasons the not like me 1 | nat I read 2 | l is for pleasure. somewhat like me 3 | 4 | a lot like me 5 |
| 3. One of the reasons I not like me 1 | read is t | o learn more about thing somewhat like me 3 | s that inf 4 | terest me. a lot like me 5 |
| 4. One of the reasons I not like me 1 | read is t 2 | o gain new knowledge. somewhat like me 3 | 4 | a lot like me 5 |
| 5. One of the reasons I not like me 1 | read is t 2 | o improve my understan somewhat like me 3 | ding of 1 4 | ife. a lot like me 5 |
| 6. One of the reasons I not like me 1 | read is t 2 | o understand others bette somewhat like me 3 | er. 4 | a lot like me 5 |
| 7. One of the reasons I not like me 1 | read is t 2 | o understand myself bett somewhat like me 3 | ter. 4 | a lot like me 5 |
| 8. I try to actively enga not like me 1 | ge myse 2 | If with what I am readin somewhat like me 3 | g. 4 | a lot like me 5 |
| 9. I read with purpose. not like me 1 | 2 | somewhat like me 3 | 4 | a lot like me 5 |
| 10. I read flexibly. <i>not like me</i> 1 | 2 | somewhat like me 3 | 4 | a lot like me 5 |

Appendix D: Missouri Assessment Program (MAP) English II End of Course (EOC) Released Item



Missouri

End-of-Course Assessment

English II



Missouri Department of Elementary and Secondary Education Released 2008



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Directions to the Student

Today you will be taking Session I of the Missouri English II Test. This is a test of how well you understand the course level expectations for English II.

There are several important things to remember:

- 1 Some of the questions will require you to read a passage in order to answer them. Read the passage carefully, and then read each question and think about the answer. Choose the one answer that you think is best.
- 2 Some of the questions will not be connected to a passage. For these questions, read each question carefully and think about the answer. Choose the one answer that you think is best.
- **3** Make sure you completely fill in the bubble for the answer in your answer sheet with a number 2 pencil.
- 4 If you do not know the answer to a question, skip it and go on. You may return to it later if you have time.
- 5 If you finish the test early, you may check over your work.
- 6 Do NOT write in your test booklet. Mark your answers directly in your answer sheet with a number 2 pencil.

Directions: Read the following passage carefully. Then answer questions 1 through 6.

Diary of Alice Morgan

April 21, 1904 (Thursday)

1 My name is Alice Morgan. I am fourteen years old, and I live in St. Louis, Missouri. Papa gave me this diary so I can write about my visits to the Louisiana Purchase Exposition—the world's fair being held this year in St. Louis to celebrate the one-hundredth anniversary of the Louisiana Purchase. He says the diary is for "posterity," which means for my own children to read some day. The fair will open in ten days. My best friend, Mattie, and I have been waiting since they first began working on the fair three years ago. It was supposed to open last year, before construction got behind, and there were many other delays.

April 24, 1904 (Sunday)

2 Today was miserable! Who would have believed a snowstorm would hit St. Louis this late in April? It may even keep the fair from opening on time. Flowers that have been blooming for a month are blanketed with snow—and the bad weather may prevent trains from arriving with supplies and fair workers. Mattie and I have moped all day. School is canceled tomorrow because of the snow, but even a holiday cannot cheer us up.

May 1, 1904 (Sunday)

- The snow melted just in time for yesterday's huge grand opening of the world's fair. Mama, Papa, little Jake, and I stayed all day until it closed at ten o'clock in the evening, and I am exhausted. The newspaper says there were 200,000 visitors for opening day.
- We've been saving our money for a long time so that we can go to the fair once a month before it closes on December 1. The admission fee is fifty cents for three of us and a quarter for Jake. (I'm writing this in my diary because Papa says it is information for posterity.) Papa only makes about \$2.50 a day at his job.
- 5 The Pike is my favorite part so far. It is a long, brick-paved avenue about ninety feet wide. This is where the entertainment takes place—animals doing tricks, singers performing, and some people juggling. Papa says there are over 6,000 performers here from countries all over the world.
- 6 I'm glad we have been saving to attend because it will take eight months of visits to see everything!

Page 2

May 14, 1904 (Saturday)

Papa took Jake, Mattie, and me to the fair today. It seems that every day the newspapers tell of the opening of a pavilion from another country or one of our forty-five states, each with displays showing its important place in the world.

June 17, 1904 (Friday)

7

8 Mattie came over today with disturbing news: She wants to get a job at the fair and not return to school in September. Many students leave school after the eighth grade, but since her brother completed high school, I thought she would too. Papa said little, but I can tell he is disappointed in my friend. I am not certain what to think. Papa was going to take us to the fair tomorrow, but Mattie's news has saddened us.

June 25, 1904 (Saturday)

- 9 We postponed our fair visit until today, and what a treat it was! Papa's boss, Mr. Truman, drove our family in his automobile. It travels at ten miles per hour, which is the speed limit. Mr. Truman said there are only 10,000 automobiles in the entire United States.
- 10 We arrived just after the gates opened at nine o'clock this morning and stayed for the opening of the New Jersey and New York exhibits. My favorite part, though (besides riding in Mr. Truman's automobile), was a ride on the Observation Wheel, a giant wheel built by Mr. George Washington Ferris that carries people up in cars 250 feet above the ground!
- 11 Mattie does not have a job at the fair yet but still insists that she will.

July 30, 1904 (Saturday)

- 12 Today was our July trip to the world's fair. Papa took our whole family and invited Mattie to go along, too. By the way, she does not have a job there yet, but she is very determined.
- 13 The fair was crowded with what Papa said was probably 100,000 people. It was Railroad and Transportation Day, which featured a parade of all kinds of transportation—even camels! After the parade, we went to visit the display of Mr. Thomas Edison's new inventions, the phonograph and the motion picture machine.

August 15, 1904 (Monday)

14 Saturday's newspaper included a story about a spectacular parade of 285 automobiles at the fair. It is the talk of all St. Louis. We will have our August fair visit next Saturday.

Go On 🕨

August 21, 1904 (Sunday)

- 15 Yesterday was so hot that we almost decided not to go to the fair, but Papa insisted that attending the Louisiana Purchase Exposition is the opportunity of a lifetime. We arrived early, while it was still cool, but even the animals along the Pike were moving slowly. The tea vendor could not sell any hot tea, so he put ice in it. Mama and Papa drank some of the cold tea and pronounced it delicious. Who has ever heard of iced tea? Maybe this fact will interest posterity.
- We saw Mattie at her new job at the fair, which is to wrap a scoop of ice cream into a waffle for customers. These "ice cream cones" began one day at the fair when another ice cream vendor ran out of dishes for his ice cream and asked the man selling waffles if he could scoop the ice cream into a waffle. The idea has caught on and has become a big hit.

November 26, 1904 (Saturday)

- 17 Today is our last visit to the fair, which closes next week. It was President's Day, and President Theodore Roosevelt attended. I saw him from a distance. He appears to be a friendly man because he smiled and shook hands with people all along the Pike.
- 18 There is good news from Mattie. She has decided to return to school. She learned a lot about the world by visiting the fair's exhibits, and now she wants to become a teacher and help children learn about other nations. She will have to study hard to catch up with our class, but I know she can do it. I am also thinking of becoming a teacher now.

94

Page 4

1. Which best lets the reader know that this passage is a diary?

- A. The narrator records thoughts and events.
- B. The narrator speaks directly to the reader.
- C. The narrator evaluates everything she sees.
- D. The narrator notes weather changes throughout.

2. Which of these sentences best summarizes the passage?

- A. Alice Morgan observes many inventions during her visits to the fair.
- B. Alice Morgan writes a journal about her experiences at the world's fair.
- C. Education is not as important as working hard and earning a living in the early 1900s.
- **D.** The weather plays an important part in shaping the history of the Louisiana Purchase Exposition.

3. Read these sentences from the passage.

"The Pike is my favorite part so far. . . . This is where the entertainment takes place—animals doing tricks, singers performing, and some people juggling."

Which modified version of these sentences <u>best</u> reflects the use of personification?

- A. The Pike's performers promenade with pride through the center of the fair.
- **B.** The Pike is like a river flowing through the center of the fair—full of animals, singers, and jugglers.
- **C.** The Pike dances through the center of the World's Fair—bragging of its performing animals, singers, and jugglers.
- **D.** The Pike is a hotbed of activity, teeming with animals jumping through rings of fire, singers crooning, and jugglers serenading the crowd.

Go On ► Page 5

- 4. Which <u>best</u> explains how the setting of the Louisiana Purchase Exposition contributed to the invention of new items?
 - A. The weather forced vendors to improvise and create new ways of selling products.
 - **B.** The centennial of the Louisiana Purchase prompted inventors to create new products.
 - C. The fair was located near the Mississippi River, which eased transportation of goods.
 - **D.** The large crowds demanded spectacular entertainment and accommodating surroundings.

5. Which is the best reason for the narrator's dating what she is writing?

- A. She is organizing her thoughts for future readers.
- B. She is counting down the days until a big event.
- C. Certain things at the exposition are being recorded.
- D. Specific dates were more important to people at that time.

6. Which of these words <u>best</u> describes the overall tone of Alice Morgan's diary?

- A. dissatisfied
- B. excited
- C. frivolous
- D. impartial

Page 6