

Using Technology and Multimodal Literacy
to Actively Engage
Struggling and Disengaged Readers

by

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Abstract

The purpose of this study is to investigate how using technology, specifically BookFlix by Scholastic Inc. and Capstone Interactive Library was used to engage struggling and disengaged readers. Struggling readers are at a great risk for failure and dropping out of school, therefore, using other resources such as digital literacy can aid in supporting readers who struggle to decode words and have trouble with fluency and comprehension. School library resources can provide students with eBooks that engage and enable readers to read a variety of books. Data was gathered through parent and student surveys, observations, interviews and student response journals. Through exploration and exposure to different genres of eBooks students were actively engaged by reading eBooks that supported their fluency and comprehension and gave students an opportunity to participate in cooperative learning. Students gained a better understanding of eBooks as well as digital literacy skills that will benefit them in accessing literacy through different 21st century modes.

Chapter One

Introduction

Jane is a fourth grader who loves school, but struggles with reading. When asked about her reading, she admits she does not read well. She reads at a second grade level and her favorite book series is *Amelia Bedelia* by Peggy Parrish. She is interested in non-fiction as well reading books about sea turtles. She uses computers only in the school setting, and will ask for help when needed from an adult or peer. Although she has read eBooks before in school, her experience with them has been limited and she had no experience with the eBooks available through her school library. Literacy encompasses many domains, and digital literacy can support struggling readers and non-readers such as Jane and how they perceive their reading experiences and literacy learning through technology.

Since reading is an important skill that takes place across all content areas and one that is valuable for student achievement, it is important to support student's reading preferences during DEAR time (Drop Everything and Read). DEAR is a time for students to select what they want to read based on their interest and ability. The time that students spend reading independently gives them an opportunity to read what is available within the school library, classroom library and any book that students bring from home. Therefore, students should be able to access as a variety of reading material to support their reading needs.

In this day and age, reading is changing as people access reading online through the computer and through other devices. I was interested in discovering if reading eBooks online makes a difference in a student's reading engagement during independent reading time, and if this experience sparks intrinsic motivation. It is important to support those readers who struggle through the use of technology due to their difficulties decoding independently. eBooks can

expose struggling readers to more sophisticated material while supporting them through video, text highlighting and vocabulary definitions.

In the 21st century, technological advances are occurring rapidly and children's exposure to technology is a huge part of a child's life; therefore, many children may come to school with additional literacy understandings that are not being utilized in the school setting. Meanwhile, some teachers continue to use the same teaching archetype to facilitate reading and writing instruction of students, creating a dichotomy between traditional and digital literacies. In addition, teachers are challenged to meet the demands of integrating technology because of the lack of actual computers and digital devices in the classroom that could enhance student learning. Since literacy learning is important, especially reading and writing, digital literacies are a meaningful resource to enhance a student's learning, incorporating their interests to increase student motivation and achievement; thus equipping students to be technology savvy and globally competitive. Hence, it is up to teachers to revolutionize their thinking about a pedagogy that embraces all literacies to better serve students (Gunter & Kenny, 2008). Teachers are responsible for preparing students to meet the academic expectations of today's Common Core State Standards (CCSS) which include reading, writing, listening, speaking and viewing. Digital literacies can be the tools that teachers use to help students to meet these standards through different literacy resources that are available.

School libraries have access to digital literacies that can aid struggling readers or non-readers in their literacy through using eBooks available online. Students should be able to access multiple forms of literary text during independent reading time which helps engage and motivate students and can be used as a bridge to reading traditional texts. Hernandez states (2011) if children do not develop the essential literacy skills by third grade they will continue to struggle

with reading throughout their educational experience, and are at an increased risk for dropping out of high school. Therefore, teachers should consider continuing to look for innovative ways to engage and motivate readers, so students develop a love for reading and develop the skills necessary to meet the demands of the CCSS (Common Core State Standards) which include reading, writing, listening, speaking and viewing. Digital literacies can be the means that teachers use to help students to meet these standards through different literacy resources that are available. In school, students continue to read traditional texts and many teachers continue to use the same pedagogy that does not embrace technological advances. To ensure the needs of digitally literate students are addressed, and also assist students who are less digitally literate in the acquisition of essential knowledge and skills that will aid in the literacy learning and development, it is imperative to integrate technology that will prepare students for the changing global landscape of literacy.

Teaching struggling readers is complex because many students come to school as digital natives. The term, ‘digital natives’ recognizes that children grow up in a digital world and are more proficient in technology than traditional literacies such as printed media (Burke, Butland, Roberts & Snow, 2013). Therefore, it is challenging to address children who are more adept at technology than traditional literacies (Bromely, 2010). Bromley (2010) reveals that technologies are changing the landscape of literacy learning and provides a wide range of opportunities to enhance student learning and reading experiences. Burke, Butland, Roberts & Snow (2013) conducted a study examining teacher beliefs when technology was integrated in the classroom and their findings indicated that teachers need to make a commitment to “rethink” their current instructional practices. Ultimately, teachers should create a literacy learning environment inclusive of a multifaceted, technologically based literacy program that incorporates the elements

of the Common Core. A well balanced literacy program is crucial in the development and learning of a critically literate student who can meet the demands of what is expected in English Language Arts.

Significance of the Problem

Reading proficiency is a concern of all literacy professionals, educators, politicians as well as parents; as children in the United States are assessed rigorously in schools and compared to other children around the world. Statistical data provided from NAEP (National Assessment of Educational Progress) reveals that in New York and Florida, all fourth grade students scored higher in the nation in reading than other states in the union (NAEP, 2015). From 2013 to 2014, New York fourth graders scores increased from 30 percent proficiency to 32 percent proficiency; this indicates that there is much room for improvement (NAEP, 2015). Since this data includes all students, it is important think about how children could benefit from other forms of literacy formats. Students will need literacy skills including reading and writing; whether on paper or digitally to be effective in their job or career choice. Students will need critical literacy skills to be effective across subject content areas within their various formalized education settings and within their job or career choice.

The face of literacy learning is evolving because of technological advances; yet schools continue to teach reading and writing with a traditional pedagogy (Lapp, Moss & Roswell, 2012). Reading is a skill which takes place across all content areas; thus a student's literacy proficiency is necessary for success. Unfortunately, teachers are faced with struggling and non-engaged readers with different interests and abilities. Teachers should consider using every literacy tool available to them to create and foster a literacy learning environment which engages

students; and where students can use their strengths, knowledge and interests to deepen and enhance their learning. As the medium of literacy changes, so does the way students decode and comprehend those literacies (Canmack, 2004). More importantly, new literacies are changing the social and cultural landscape where learning takes place in a global community. Stole (2008) observes that new literacies, such as digital literacy, are not being used consistently in the classroom. Some teachers do not use all the resources available or the resources are simply inaccessible to many students. Considering that students are learning in the digital age, it is troubling that they cannot always access technology which could possibly assist in addressing their literacy learning needs. Eventually, students will have to use technology on a daily basis in order to effectively interact with a global community.

My research study is important because it will shed light on current literacy practices and inform teachers and educators of ways to integrate school library digital technology such as BookFlix and Capstone Interactive Library seamlessly into classroom literacy instruction. In addition, my study examined student interest and the digital knowledge they bring with them to school. As new literacies emerge, digital natives will continue to interact and apply their current funds of knowledge as well as deepen and expand their literacy learning and understanding in the classroom. In order to prepare students to meet the demands of the changing literate community, it is critical to utilize new literacies such as eBooks, e-readers, blogs, instant messaging and podcasting in order to bridge learning to reading traditional texts to actively engage the student in literacy learning and maximize on their literacy development, learning and achievement. Ultimately, by integrating the use of digital literacies in traditional literacy instruction, student engagement will increase for struggling non-readers as well as their intrinsic motivation to read.

The Purpose of the Study

The purpose of my study was to explore the use of school digital literacies such as BookFlix and Capstone Interactive Library to increase the reading engagement of struggling non-engaged readers. The insight gained from my study will not only inform my thinking, but also influence how current and future teachers and educators can use the digital technology available through their respective school libraries to enhance student reading experiences. By offering an option of reading online, struggling students will be able to benefit from the features of digital eBooks such as audio support with text to speech, text highlighting and vocabulary tools.

Gardener's multiple intelligences reveal that each student learns differently, so the use of multimedia to aid in facilitating literacy learning will be beneficial in addressing the students' multiple intelligences. Having students engage in reading online provided me with an opportunity to assess students' digital literacy skills and their role as digital natives. Finally, the use of digital literacies addresses the visual learner and also aims to capture the interest of the digital native who interacts visually with technology on a day to day basis (Burke, Butland, Roberts & Snow, 2013). Through the findings obtained from conducting research of this nature I looked to answer the following research questions:

- How can teachers use multimodal and digital literacies to engage struggling readers?
- What kinds of digital literacy knowledge do students bring to the classroom that can be taken into consideration when designing literacy instruction that aims to enrich and enhance students' literacy learning?

- What are the perceptions of students when using digital literacies during their literacy block?

Rationale

Encouraging children to read can be challenging as their interests and knowledge are continuously changing because of new technologies. Therefore, teachers should consider rethinking their current pedagogical practices and transform their literacy instruction to include the diverse ways students interact with texts. New literacies are part of our everyday lives and teachers should consider embracing new literacies and utilize them to the fullest capacity. In addition, the way we read is changing with the use of technological devices such as the Kindle, Nook, iPad and other forms of current media. By not exploring current literacy learning trends, students will be denied valuable knowledge and access to literacies that they will enrich their literacy education. Therefore, it is necessary to look at literacy learning and instruction through a different lens, one that takes into consideration the incorporation of digital literacies into traditional literacy instruction; thus bridging traditional text with non-traditional texts to enhance and enrich the literacy learning and literacy development of the student; making the literacy experience more meaningful and engaging. As a result, students may become more engaged and be more likely to adeptly use all forms literacy accessible to them.

Summary

The process in which children read is changing because of the technological advances being made exponentially. Therefore, I am interested in how new literacies can be used to promote and encourage students to read. In addition, I understand the need to link teacher beliefs

with practice to better serve students including integrating multiliteracies in the classroom. Now more than ever, literacy learning is a concern that is of high priority with teachers and educators. As a teacher, I am interested in effectively addressing students' needs and integrating new literacies to engage them in reading and to prepare them to participate in the changing global community.

Chapter Two: Literature Review

Introduction

Research in regards to reading engagement has been studied, but the integration of multiliteracies and digital literacies is now on the forefront of educational research. There is a growing demand for students to develop technological literacies for the 21st century (Kitson, Fletcher & Kearney, 2007) and this includes a paradigm shift in pedagogy and practice. This shift addresses how teachers' practices can widely vary depending on the school district or even the classroom setting. The integration of technology is a necessity, as children are growing up as digital natives being exposed to multiple technologies. By using technology in literacy instruction, struggling readers have another viable resource to aid in their literacy skills, thereby engaging non-readers in active critical literacy learning.

Research has been done on envisioning new and critical literacies (Lapp, Moss, Rowsell, 2012) in the classroom. Researchers Lapp, Moss & Rowsell (2012) examined how students use multiple text types to respond and analyze texts through a critical lens. Bromley (2010) states that the way we read and write has changed and teachers need to change their traditional pedagogical beliefs about multiliteracies including digital literacy. The research performed by Burke, Butland, Roberts & Snow (2013) discussed the term “digital natives” and explained how children are growing up in the digital age bringing new knowledge to school. In addition, research has been done on the use of multiplatform books (Moss, 2012) and digital media such as Digital booktalk (Gunter & Kenny, 2008) to entice technologically savvy and reluctant readers. However, all of this previous research does not address specific student interest, and how this aspect might offer new insight about how to engage students in digital literacies and reading traditional texts in order to maximize on the potential of their literacy learning. My

research study is intended to provide additional insight that is not addressed in previous research. My literature review will go into further detail on how factors such as student interest and perceptions, teacher pedagogy and practice and how tech culture influences the literacy learning, development and engagement of the student.

Reading Engagement and Motivation

The ability to read a wide variety of text is an important component in the reading achievement of a child. No child is exactly the same each child's reading experience and approach to reading is different. Each child comes to the reading experience with different funds of knowledge, understandings and strategies. Therefore, reading engagement is a motivating factor when it comes to a child making a conscious decision when selecting a text. This intimate and personal decision is dependent on the availability of reading material, student interests and the time the child is given to read independently.

Independent reading time or DEAR (Drop Everything and Read) is a time during school when children have the opportunity to choose what they want to read. Even though children have a choice, there are limitations in relation to the books or reading material that is available for them to access and they are able to read. Children are reliant on the school or classroom library, and many do not have the freedom to read online. Online reading is just not yet an acceptable choice for a variety of reasons. From a teacher's point of view, it is hard to monitor what the child is reading or if they are on a site that is deemed acceptable and age appropriate. Unfortunately, with many children struggling to read, teachers should consider rethinking their beliefs and offer digital technology as a supplement to traditional text-based materials. If children have the opportunity to choose through which medium (i.e. traditional text or online)

they want to read through then their engagement is triggered. Jones & Brown (2011) discuss how reading engagement increases motivation and that reading engagement is a precursor to the literacy achievement of a child. So offering the student the choice to access text through the computer may increase the student's motivation to read independently to practice employing their literacy skills (i.e. inferring, predicting, making connections to the text, etc.) to derive meaning and understanding from the experience which are the ultimate goals of independent reading. Considering that student choice can make such a difference in the student's desire to read and has an effect on academic performance; hence, it is worth considering the integration of digital technology. Computers are changing the face of literacy learning as children are interacting with technology at a young age (Jones & Brown, 2011). As children interact with computers and reap the benefits from the information that they are exposed to, they understand that this resource has unlimited possibilities and learn that information is at their fingertips. Therefore, offering safe websites to access online text is one way to ensure that children begin to learn how to access resources online and what to look for in determining if a site is valid and trustworthy.

Student Interest and Perception

For teachers, having struggling readers in the classroom is not uncommon, and educational research has offered different views of how to engage them in the activity of reading traditional texts. At the same time, students are immersed in a technological world that demands their attention. According to Gunter's (2012) research study, new technologies are replacing traditional text-based media and making students question the value of reading and writing. Therefore, it is important to consider students' needs, interests and the literacy experiences they

are bringing with them into the classroom to inform literacy practices and the design of student-centered literacy instruction, so students' interests and students' literacy learning needs are realized. Failure to address students' needs could continue to have an adverse influence on their perception of literacy learning (Gunter 2012). Finally, it is important to integrate the forms of media that engage students in critical literacies; thereby addressing the development of multiliteracy literacy skills required to be globally competitive for the 21st century.

Gunter (2012) conducted a six year study that had teachers use an intervention called Digital Booktalk. The premise was that many students today have a hard time creating a movie in their head while reading because of the exposure to digital technologies in which they are exposed to visual images early on (Gunter, 2012). Therefore, students do not understand the act of reading and creating an image in their mind, and this creates ambivalence toward reading text-based media. Digital Booktalk provided students with the opportunity of creating videos that reviewed a book. Through this intervention, students began to understand the role that video and movies play and what the purpose of reading a book serves. The use of Digital Booktalk addressed the literacy needs of students who had a weak understanding of the story process (Gunter, 2012). The process of creating a review of a book also provided students with intrinsic motivation that was fueled by the need to make a video that was representative of their thinking about a book.

As Gunter (2012) concluded the study, the findings suggested that student engagement in text-based reading had increased after students used Digital Booktalk. Many of the participants were in reading remediation classes; consequently, Digital Booktalk provided them with a medium to create an authentic artifact (Gunter 2012). The other effects of this literacy

experience included an understanding of cause and effect and a general increase in the use of descriptives to describe events. In addition, Digital Booktalk is a medium that is representative of students' interest and digital knowledge base and integrates a student's strengths (Gunter 2012). The research also revealed that the reason why some attempts to integrate technology to motivate readers fail is that the technology is used for drill and practice, and does not provide students with motivation (Gunter 2012). Finally, Gunter (2012) found that if students were able to enjoy the process of learning on their own terms, they would understand the need for reading and knowledge acquisition through use of different media. Ultimately, students may not prefer reading traditional text-based media, but through this intervention students' perception about the importance of reading text-based media changed.

Teacher Pedagogy and Practice

In order to realize the assimilation of multiliteracies in the classroom, teachers should consider rethinking their current use of technology and refashioning their pedagogy and practice to accommodate the literacy needs of students and demands of a global culture. Teachers are faced with demands of a contradictory nature, where existing pedagogy support the instruction of the traditional skills of reading and writing (Honan, 2010). In 2010, Honan began discourses with teachers to explore their use of technology in the classroom. Through these discourses, it was determined that time was an issue when considering the use of technology, and that computers were viewed as a "tool" (Honan 2010). Furthermore, teachers were more comfortable using traditional reading practices they were more familiar with (Honan, 2010). With the pressure of preparing students for standardized testing, teachers utilized methods they were accustomed to, and did not focus on creative ways to integrate technology into literacy learning.

Students who struggle with reading are not being attended to because of teacher misconception of the use of technology and their current pedagogy and literacy practice. If students' needs are not met, then they will not develop the technological skills they will need to be successful in the future. Currently, there is much criticism that has emerged from employer of various businesses that employees are lacking basic literacy skills to communicate effectively, and this demands the need for a change in the way teachers perceive literacy and how to teach it (Honan, 2010). Therefore, it is evident that students need access to multiliteracies to prepare them for the technological changes and multiliteracies that they will face in the 21st century.

Changing teacher beliefs and pedagogy is a challenge in the light of the current educational environment that directly ties student achievement with teacher effectiveness. Nonetheless, teachers are the means by which practice can transform literacy learning by providing a literacy environment where students are exposed to new and multiliteracies that will expand student engagement and the development of literacy skills. In 2007, Kitson, Fletcher & Kearney explored the idea of teaching practices and beliefs and a move toward multiliteracies. The research demonstrated that even if teachers believed in the use of multiliteracies, the teachers continued to use traditional literacy practices to teach reading (Kitson, Fletcher & Kearney, 2007). This inconsistency between pedagogy and practice illustrates the incongruence between teacher belief and practice.

Teachers will be fulfilling the reality of transforming current literacy practices to reflect the representative literacies that children are growing up with (Burke, Butland, Roberts & Snow, 2013). As a new generation of teachers emerges, their expertise will mirror changing pedagogical ideas founded in their teacher education. In the meantime, current teachers should

consider reconceptualizing their practice and use technology in new ways to address student needs.

Tech Culture on the Literacy Learning and Development of the Student

Today's culture has changed dramatically in the past ten years with the ever evolving technological advances that impact how we access, receive and interact with different forms of literature. The way people access information and communicate has been altered with the introduction of new technologies and the advancement in cell phones or "multimedia devices" in particular. People literally have information available at their fingertips 24/7. As a consequence, children are exposed to a variety of technologies outside of school, and they have become comfortable with this medium because they have been exposed to it throughout their childhood (Bromely 2010). As people continue to use devices such as Kindles, Nooks and iPads for reading, the act of reading is redefined through a technological lens. Reading and writing is evolving in our culture due rapid technological advancements and will continue to do so (Bromely 2010). In contrast, the reading experiences children are exposed to in school are mostly text-based, creating a dichotomy between the school environment and the outside world.

In addition, social networking has also influenced the way we communicate with other people as we can message each other instantly. The use of social networks like Facebook, Twitter, Snap Chat, etc. are another mode we use to communicate with others; and children are growing up acknowledging this way of interacting with others. Children are becoming digital natives and assume the use of technology is a large part of their daily lives. Bromely (2010) realizes that technologies are having an impact on grammar and usage based on abbreviations used in texting and Instant Messaging. This is essential, as people want efficient ways to

communicate with each other. Henceforth, Standardized English, as we know it, is changing with the use of technology and will continue to evolve (Bromely 2010). Understanding the changes our culture is undergoing can have a positive impact if teachers consider how culture is impacting students' perception of literacy learning, especially the reading process. Many students will think of the traditional process as boring or somewhat antiquated compared to what they are exposed to outside of school. Therefore, it is essential to incorporate new learning processes, being innovative in utilizing diverse forms of literacy and explaining their purpose and appropriateness. By using the right tools and linking authentic assessments, students will be challenged and engaged in the process.

Summary

In order to better serve students and engage them in the activity of reading, it is necessary to consider their interests that include digital literacy. Teachers can provide the mediums that are appropriate to meet student needs and engage them in critical thinking. At the same time, teachers should continue to develop their own technological skills and match their constructive beliefs to their practice. Despite the challenges of technology in some schools, teachers may need to take a creative approach to integrate multiliteracies in their literacy lessons. Overall, teachers can revolutionize their practice to engage the students that need it the most – the struggling read and the non-reader.

Chapter Three: Methods and Procedures

Introduction

This study was designed to explore the ways to engage struggling readers in the activity of reading through the lens of multiliteracies. Technology was an integral part of the research process including the examination of how parents and students view technology. One important aspect of this research study was to explore all aspects of how students perceive literacy learning and how they react when digital literacy is integrated into their independent reading time. Through this process, I gained an understanding of many different student beliefs and this informed ways to consider modifying teacher's pedagogy and practice regarding the integration of multiliteracies in the classroom. In this chapter will examine participants, setting, procedures and data collection I used. In addition, it will attend to the ways I analyzed my data and discussed the limitations of this research study.

Questions

Through this research study I answered these questions:

- How can teachers use multimodal and digital literacies to engage struggling readers?
- What kinds of digital literacy knowledge do students bring to the classroom that can be taken into consideration when designing literacy instruction that aims to enrich and enhance students' literacy learning?
- What are the perceptions of students when using digital literacies during their literacy block?

Participants and Context

My study focused on the literacy learning and engagement of five fourth grade students, three girls and two boys, nine to ten years old. One girl reads at a second grade level, the rest read at a fourth grade level and have a range of interests. I intended to identify if digital media helped motivate these readers to read more online and if digital media helped students seek out traditional print- based material to read on their own. In addition, my study revealed the effects of using eBooks to increase a student's digital literacy knowledge.

Positionality as a Researcher

I am currently a substitute teacher in a suburban school district in Upstate New York. I graduated from The College at Brockport and have dual certifications in General Education (grades 1-6) and Students with Disabilities (grades 1-6). I am pursuing my Master's degree in Literacy and will be certified in Literacy (Birth – 12). In addition, I have worked extensively with ELLs (English Language Learners) and will be certified in TESOL (Teacher of English to a Speakers of Other Languages). My understanding of the Common Core resonates in my instruction as well as the importance of literacy and multiliteracy learning.

During the period of time I returned to college to acquire my Bachelor's degree in English, I entered an environment where I needed to become technology savvy. Consequently, I had to quickly learn computer skills to aid in my knowledge of accessing, preparing and transmitting information. In some instances, I sought assistance from my husband and young daughter. My understanding began to deepen regarding how the skills and resources required for completing my second degree differed from those I used in my first academic experience. I needed to use technology on a more frequent basis for writing papers, uploading documents, preparing PowerPoint and Prezi presentations and emailing. In addition, I suddenly had access

to an abundance of information at my fingertips in the comfort of my home. After years of schooling at the collegiate level, I really thought I knew a lot about technology until I took a course in Critical and Multiliteracies. The first assignment for this course was a multiliteracy questionnaire. When I filled out the questionnaire, I realized I had much more to learn. This multiliteracy course gave me the opportunity to experiment with technology in ways I had never imagined. From that day, I decided to keep learning and integrate technology purposefully in my everyday life and in my instruction.

Along my academic journey, I have developed insight and understanding regarding the different means of communicating and learning and their appropriateness accordingly. Every student should have a computer because they will need to navigate through the influx of technological changes that occur exponentially. In conclusion, literacy experiences can make a difference in a child's life because they are being exposed to new information and other perspectives that can broaden their literacy learning and deepen their understanding. Different literacy experiences can help children become self-regulated learners; learners that use strategies and are motivated and self-monitor their learning. By becoming a self-regulated learner, a child can become a lifelong learner and continue to be critical and open to new ideas and knowledge to better their lives. I believe that I am a lifelong learner and a curious learner of all that comes my way, and as a teacher this is my goal for all students.

Procedures

This study was conducted over a six week period during the spring of 2015. I conducted six mini lessons incorporating the digital literacy of BookFlix and Capstone Digital Library, and examined how the student participants' reading engagement and learning is influenced. I

observed and interacted with five students two days a week for six weeks during the hour and half of an ELA block in a fourth grade classroom in a suburban school setting in upstate New York. The students had an opportunity to explore eBooks during their independent reading time and comment on their experience and their learning by responding to questions in a student response journal. In addition, at the end of each independent reading time for those six weeks of my study, I gave the students time to talk about the eBook they read and their thoughts and perceptions about reading eBooks.

Context of ELA

In order to analyze the influence of multiliteracies with struggling readers, I examined the ELA environment and how the teacher used this time. The area that I was most interested in was whole class instruction because I wanted to identify how multiliteracies are used during this time and if the use is effective. Whole class instruction also shed light on how engaged students were and if differentiation took place. Primarily, the teacher used the ELA time block to teach Social Studies and the students were studying the American Revolution. The teacher had students read out loud from their textbook stopping for comprehension checks. The teacher also integrated a video series *Liberty Kids* as a supplementary source which actively engaged students. The teacher differentiated instruction using a variety of resources that aided in their comprehension and understanding of the material.

For their independent reading time, there were opportunities to examine how the five participants reacted to the use of digital literacy during a time where students usually read traditional printed material. By providing mini lessons on eBooks, I was able to observe how students interacted with digital literacy and the impact it made on their overall reading

motivation. Since children are exposed to a good deal of visual literacy, I attempted to use this aspect of their schema to influence their literacy learning.

Data Collection and Analysis

During the course of my study, I used a variety of collection instruments in order to obtain information to answer my research questions. The data collection instruments included a parent and student survey, interviews, anecdotal notes, student response journals, a reflection journal as well as student work. The Parent and Student surveys provided initial information about students' reading preferences and interests.

Parent and Student Survey

One of the first interviews that I administered was in the form of a parent survey. I wanted to determine what each student participant's home literacy environment is like and how digital literacy is used in the home by parents and their child. These interviews helped fill in information from the student interviews and gave me a perspective about the home literacy of the student I would work with throughout this study. The parent surveys were valuable to monitor consistencies and inconsistencies in the student survey.

The student survey helped me to gauge each student participant's reading preferences and multiliteracy development. This interview also provided insight into what interests the child and how to use those interests to increase their reading engagement. I looked for any digital literacy knowledge and see if my hypothesis about children bringing digital knowledge to school is valid. The interviews helped paint a picture of the participants including their strengths and weaknesses and helped identify students' needs.

Anecdotal Notes and Reflection Journal

For times that I observed ELA lessons, I used anecdotal notes to record my observations. These notes only recorded what I observed from the lesson and the students. Anecdotal notes did not include any impressions because I want to remain unbiased. I took anecdotal notes and used them as a guide to record my impressions in a reflection journal. I used these for coding data when I finished the study. I continued to look for answers to my research questions and the students' strengths and weaknesses. Finally, I looked for what worked or didn't work regarding the lesson and any questions that resulted from the study.

Data Analysis

The first data tool that I used was the parent survey and I used this to gather information about the student and the home literacy environment. Then I administered the student survey to gain knowledge about the student's reading preferences and his or her digital literacy exposure. When analyzing, I looked for consistencies between the parent and student surveys. I assigned reading materials from the online resources that I carefully chose based on their reading level and interest. Afterwards, students had a chance to respond in their journal. Students gave a summary of the book as well as their experience of reading online. In addition, I provided time for discussion and I recorded these in my reflection journal as it happened. Finally, I used my reflection journal to record my observations during their independent reading time and whole group ELA time. My data analysis involved triangulation of data to ensure validity and to facilitate a deeper understanding of the findings by identifying regularities among data.

Limitations of the Study

This study had several limitations such as the short period of time that I had to conduct the study. This study was only six weeks long, and more information could be gleaned from

more interactions with students, as well as their parents. In addition, this study required the use of accessible technology and the accessibility was dependent on what the classroom had available. At times, accessibility of technology was by far the most challenging because the classroom had a limited amount of computers for a limited amount of time. The two websites, BookFlix and Capstone Interactive Library had a narrow amount of books. In addition, our actual face to face time was dependent on the forty minutes I spent with the students and most of the time the students were reading. Furthermore, the study took place in a suburban school setting; thus the environmental and demographic information is different which may or may not influence the observations and interviews that I conducted.

The data collection methods had limitations as well. I used interviews which provided qualitative data from all the participants in this study. The interviews provided readers' preferences and shed light on their strengths and weaknesses. I compared the results of these interviews with observations and further interactions because I was dependent on the truthfulness of the participants in the interviews. The limitations that are noted should be taken into account when reviewing this study.

Criteria for Trustworthiness

In this qualitative study, there are certain practices that I used to ensure validity and reliability of my research. First, the participants in the study are a random sampling; therefore there is an elimination of researcher bias with the participants. Other measures that I integrated were frequent debriefing sessions with an advisor and member checks that ensured a reflective commentary. Throughout this process, I made a concerted effort to examine previous research and relate my findings to the research as well. In addition, I ensured validity and reliability through the use of triangulation. I used surveys from parents and students as well as integrating

student response journals. Finally, I used a reflective journal to report on the interactions with objectivity by not integrating my own thoughts or feelings.

Chapter Four: Findings

Introduction

This chapter will discuss the findings that resulted from the digital literacy interactions when I worked with the five fourth grade students, Sally, Mary, Jane, Tom and Joe. The findings are a compilation of various tools that helped paint a picture of their reading engagement and how these literacy experiences affected their reading perception using 21st century skills.

Parent Survey

The first tool that I used was a parent multiliteracy survey (See Appendix A) that revealed a little about the home literacy environment and literacy information about the parent and their child. Initially, I reviewed these surveys to gather information about the children I would be working with and understood that the student survey would fill in blanks or substantiate what the parent survey revealed. From the parent survey, I noticed that I had a range of student abilities, as well as, students who liked reading and those who did not like reading. What stood out to me the most was whether or not the parent used technology, and more significantly, if their son or daughter used it. Four out of five students had access to a computer; however, Jane, one of the four students who had a computer, did not use it. Joe, the remaining student, did not have access to a computer at all. The two students, Jane and Joe, who did not use a computer on a regular basis, struggled with reading and did not appear to have as much exposure to technology as compared to the other students.

Student Survey

The student surveys were informative and information obtained was compared with the information collected for the administration of the parent surveys to reveal consistencies and inconsistencies between the two data tools. Two of the questions on the student survey that I

deemed important to my research were, “Do you have a computer at home?” and “Do you use it daily?” The answers from the student survey were consistent with the parent survey. Two students, Jane and Joe did not use a computer at home. The reality of not having a computer or not using it regularly was a little disconcerting, but it gave me a better understanding of the children and that they might need more support navigating the websites I intended to use for my research. This revelation made me question the accessibility of technology, and who exactly are the digital natives. Accessibility of technology would prove to be a factor at home and at school. Technology can be available, but availability is dependent on people and schedules in both the home and school.

Of the children I would work with, only one child responded positively to the question- “Do you like to read?” Jane, who struggles with reading and reads at a second grade level, said she likes to read. In addition, she wrote that she is not a good reader which made her a good subject for my research. From her written responses in her survey, I could see that she definitely struggles with writing and needed help reading the survey. I read each question to the students. The other children when asked, “Do you like to read?” responded; “Kindu,” “Not really” and the other two responded “Sometimes.” From these answers, I determined the students would be good subjects for my research of using technology to engage readers.

All the children understood that reading was not only used for school (see Appendix B) and thus displayed a situated literacy perspective. A situated literacy perspective is the ability to understand that reading has real world applications and that reading and writing take place outside school walls to achieve real- life goals (McGee & Richgels, 2012). This is important as students understand that reading takes place in all aspects of the real world and that it is an important skill to be practiced.

Observations and Student Interaction

The observations and my interaction with students would solidify how the use of eBooks helped engage readers of all levels. The first week I spent with the students, I asked them if they had ever read an eBook. All of them responded, “No.” My next question was, “What is an eBook?” None of them were quite sure, so I gave them a definition: An eBook is an electronic version of a printed book that can be read on a computer or handheld device (Oxford English Dictionary). Some of students, Sally and Tom, stated they read these books when they were in computer lab. This was helpful to know that all of the students have been exposed to eBooks in some form. Therefore, all students had some computer knowledge despite two of them not having access to computers at home.

For the first session, we had to plan ahead so that we had enough computers. The teacher only has two desktops and laptops are borrowed from the computer lab. I had difficulty finding a place to work since we would be sharing after our sessions. The library would be the most common meeting place and then the one of the computer labs. These limitations would make my data collection difficult and sometimes I had to reschedule due to availability.

Initially, I introduced the students to BookFlix and showed them how to access it by going to the school library website. I witnessed Sally and Mary helping Jane and Tom helping Joe to navigate to BookFlix. This observation would be repeated throughout my observations. The students helped each other with technology demonstrating cooperative learning. Initially, I wanted the students to explore the site and pick out something that interested them. My intention was to offer students freedom to pick out something to read and give them time to share their books with each other. Through this interaction students read different books, using features such as fiction/non-fiction pairs, read along option, text highlighting. In this first engagement,

Jane and Joe were able to watch the video book which had a text highlighting feature. After reading the books and watching the videos, the students shared their experiences and responded in the journals. All of the students were engaged and read or watched a video book depending on their ability.

Student Reflection Journal

During my interactions with the children I worked with, I had them use student journals to reflect on their experience. I taped four questions for them to respond to in their journal: Did you like using digital technology for independent reading? What is something you learned from using technology?; Summarize the book in four sentences and reflect on your reading experience. I explained to the students that their answers would help me understand their experience and they should answer how they felt about reading eBooks. In addition, for some eBooks I had them do a book review. Capturing the students' thoughts and feelings about the books they were reading online was important to me and qualified my investigation of student engagement. The time we spent discussing the plan for the day and why we were going to choose certain books gave students purpose and understanding as participants of my study, which is essential in the learning process.

For the first interaction, I had the students explore the BookFlix site to get to know the online books available and the features of the website which support literacy learning such as read along option, text highlighting and vocabulary definitions. Then I had students pick out books of their choice and share their book selection with each other. Two of students read paired books, *Scaredy Squirrel* by Melanie Watt and a non-fiction book, *Squirrels* by Derek Zobel. After the students finished reading, I left enough time for the students to respond in their journals. Sally, one of the readers who read at grade level responded to in her reflection, "I like

to explore new books.” Joe, one of my struggling readers wrote one word, “fun.” This first interaction was important as I had purposely created a student centered learning environment where the students were in charge of their learning and their experience. Student centered learning puts the responsibility of the learning on the student and creates a sense of autonomy thereby empowering students.

Another time that we met, they greeted me asking, “Are you pulling our group today?” The students were excited to meet and wondered what they would explore next. For this experience, I took the students to the library and had them access a graphic eBook about ecosystems. The students were not familiar with the Capstone Interactive Library website, so I had to explicitly instruct them on what to do. Once Sally and Mary found the book, they helped Jane. Again working with this small group, I observed the students helping each other. This fostered an environment of cooperative learning and a safe environment where students could ask each other for help.

Before I had the students explore the book, *Exploring Ecosystems with Max Axiom, Super Scientist* by Agnieszka Biskup. I first explained that a graphic novel is a format of a book in comic strip form and can be fiction or non-fiction and can be any type of genre (Get Graphic.org). In addition, I explained the importance of ecosystems as they had been reading about squirrels. Afterwards, I asked them about the book and many did not care for the book. The consensus was that “the narrator was corny” and the content was “boring.” The only one who liked it was Jane, who struggles with reading but enjoys reading and learning. She said she liked the book because it was about science and she said she likes science. Jane was able to read this eBook because of the text to speech feature, otherwise she would not have been able to read this independently. Even though most of the students did not care for the book, I asked the girls

if they would read a graphic novel again. All of them said, “Yes” and Sally and Mary said they were interested in reading the graphic novel, *Smile* by Raina Telgemeier. Joe commented that a graphic novel is like a comic book and that he likes to read comic books. The purpose of my lesson was to introduce students to graphic novels because this offers students another format of book they might find engaging and access independently. Furthermore, graphic novels are extremely popular because they appeal to the visual learner and available at all reading levels.

Over the last three weeks, I decided to do a lesson using paired texts on BookFlix. I understood that the students enjoyed exploring different texts, but would need guidance to discover books that would engage them and excite their thinking. I chose the fiction eBook, *Amazing Grace* by Mary Hoffman and Caroline Binch and *Jackie Robinson: A Life of Determination* by Colleen Sexton. As I introduced the book *Amazing Grace*, I asked the students to think about the word *discrimination* and what it meant. It was important for me that the students understood that discrimination is not only about race, but discrimination can also be about gender, religion and age.

After the reading *Amazing Grace*, I had the students write a summary of the book and identify the message of the story. *Amazing Grace* is about a little girl who wants to be Peter Pan in the school play, but people are telling her she cannot because she is African- American and she is a girl. She ends up winning the part due to her ability and because she believes in herself. I was interested in what the students thought was the message of the story. Below are excerpts of their thinking.

Sally wrote: “The message was that you can do anything you want. Its important because don’t let anyone tell you what you can’t or can be.”

Tom wrote: “And she saw that it doesn’t matter what you look like it’s about who you are.”

Joe wrote: “You don’t need to listen to people you can be anything.”

Jane wrote: “you can be anytin.”

Mary wrote: “You can be anything you want to be.”

These responses were on target and as we discussed the book more all of them understood that believing in yourself is important in the book but in life as well.

The important part of reading books is sharing and talking about the theme and the story’s message. As we read *Amazing Grace*, we stopped to discuss if the people were right that Grace could not be Peter Pan. All of the students were excited to answer, hands flying up. I asked Mary, who is African-American, what she thought. She said no one could tell her she couldn’t play Peter Pan and then started relating it to herself. Additionally, Mary said she could be President if she wants to. In an age, where diversity and acceptance of others is so important, it was interesting to hear their passionate responses that Grace should not have been told she couldn’t play Peter Pan. I also asked if the people in the story were right or wrong. Unanimously, all of the students said the people in the story were wrong and it was kind of like bullying her. The students had made a good point in our discussion, discrimination is bullying. By discussing the book and reading their responses, it was apparent that all the students were engaged and that their comprehension was on target. I was surprised that the boys liked the book, but the theme of the book is universal and I related believing in oneself to school and sports.

Our final meeting was to read, *Jackie Robinson: A Life of Determination*. I was excited to introduce this book because Jackie Robinson is such an important person to discuss when speaking of discrimination, and how he overcame his struggles by always performing at his best. This is such a powerful message as students need to know they can be anything despite any challenges they may encounter. This is especially important in school as some students struggle academically. Before they read the book, I shared that Jackie Robinson is one of my heroes and we discussed two important vocabulary words, discrimination and segregation.

The challenges experienced with conducting this lesson were we had to read in the hall and share one computer. Accessing space and technology have been issues since the beginning of this study, but the students were always flexible. During the reading, they wanted to share right away but I told them we would have time at the end. After reading, I gave them a paper to draw Jackie Robinson if they wanted and to respond to questions: What difficulties did he face? How did he overcome them? And, why do you think this is important?

Joe wrote: "He faced being insulted and bullied. He hid his anger and kept going. This was important because it showed people that they can be anyone."

Sally wrote: "He was insulted and people didn't want him to play on the Brooklyn Dodgers. He hid his anger. He's famous."

Mary wrote: "He was insulted also bullied. He hid his anger. He was trying to concentrate (concentrate) on his priority (priority), also his goal. He became famous."

Tom wrote: "He faced being insulted. Also his teammates didn't even like him. Also he didn't give up. He didn't listen to the other people said. Finally, this is important because he kept going."

Jane wrote: “that he can’t play with them (his teammates) he was boled (bullied) because he fit (fought) it and then ever like him.”

Jane meant that he (Jackie Robinson) had a hard time playing because his teammates didn’t like him. He was bullied, he fought it and everyone liked him in the end. Jane had a hard time with the writing assessment so I always spoke with her after. She was the only one who read these last two books twice.

It was interesting and satisfying to see the students sharing their perspectives and explaining their thinking using the vocabulary from the text, such as *faced* and *insulted*. The students benefited from the read along feature because it reinforced fluency and the discussion helped facilitate their comprehension and engaged them as readers. Independent reading is only effective if students can read engaging material at their level and if they can do this independently. Sometimes struggling readers need guidance in picking out material and need an opportunity to discuss what they have read. This was apparent with Jane as she struggled with her written response. She was more comfortable discussing the book than writing the response. The written response helped her practice her writing and will help her teacher identify issues for the future.

Summary

EBooks that were accessed through BookFlix and Capstone Interactive Library engaged readers as they had some time to explore books on their own initially. As we progressed, I had students read books that I thought they might not read but may ultimately capture their interest. Overall, students enjoyed accessing different books and discussing them with each other. Students indicated they wanted to access BookFlix at home making this project successful as it

inspired intrinsic motivation. Prior to conducting my study, I wondered what digital literacies students brought to school. The answer was highlighted in my research that although some students do not have extensive digital literacy knowledge other children who do can help those children limited in their digital knowledge and or experiences in a cooperative learning setting. In addition, digital literacy was used purposefully and the students were able to respond in ways that captured their comprehension. EBooks support comprehension and fluency through the use of text to speech, vocabulary definitions and text highlighting. These features aid in motivating children to read more books because it inspires intrinsic motivation. Students that struggled were interested in BookFlix because they could access more sophisticated books.

Chapter Five: Conclusions and Recommendations

The purpose of my research was to investigate if using digital technology specifically BookFlix and Capstone Interactive Library engaged struggling and non-readers. Since my participants were of various reading levels, the findings captured a wider range of student engagement.

Implications for Students

Based on the findings and student engagement, the student participants now have knowledge of ways to access eBooks and understand that there are different ways to read besides reading traditional printed books. In addition, this study helped prepare these students for their summer reading because the school is using a new resource online that has eBooks and MyOn and students will log their reading online. Students can pick genres they are interested in and then take a placement test to determine their Lexile level. In addition, Jane and Joe, the two student participants, who need more support, can access a resource that can aid in their learning. Teachers reminded students that they can access MyOn through the public library if they don't have access to a computer at home. Ultimately, the use of eBooks specifically BookFlix can help with fluency and vocabulary knowledge due to the literacy support features of read along, text highlighting and vocabulary definitions. All of these students will be able to practice their digital literacy understandings and skills through the utilization of multimodal literacy by accessing 21st century technology to enhance and expand reading and literacy skills.

Implications for Teachers

My study has allowed me to gain a greater understanding of how the integration of eBooks can aid struggling readers during their independent reading time. Struggling readers have

a disadvantage during this time because they often have difficulty reading on their own. eBooks have features that can make the reading experience more rewarding as students use features such as read along options, text highlighting and vocabulary definitions that support their comprehension. In order to ensure a child has the proper literacy support, it is important for the teacher to investigate eBook sites, know the types of eBooks it offers, and if the site has features that support comprehension and fluency. The hardest part of using eBook sites is getting books that are leveled because many sites do not offer levels of books. Therefore, it is essential for teachers to preview eBooks and guide students in their selection of appropriate material. This process of giving suggestions is not any different when offering suggestions for traditional texts within the classroom.

In addition, using eBooks supports the use of technology within the classroom as a supplement to literacy learning. As the use of technology expands, students need to be supported in 21st century literacy learning and that includes using various forms of technology in the classroom. In my findings, it was apparent that sometimes accessing technology in a school can be challenging depending on the availability of computers. This is where teachers need to be creative when asking students to use technology and knowing how to assign activities where students can work together promoting cooperative learning in the process. Cooperative learning is beneficial as students share their knowledge, take responsibility for their learning, share different points of view, justify their view points and work toward a common goal. As a result learning becomes more meaningful because students took ownership.

Finally, as a teacher I will be able to use multiple resources and modes of literacy incite their motivation as well as in supporting student literacy comprehension. Knowledge of the digital resources available within the school should be a priority because students should have

every opportunity to be exposed to every tool or resource that supports their literacy learning. As I continue to promote the idea of lifelong learning, I will be open to all resources that enrich students' reading experiences. I am dedicated to the belief of supporting literacy learning through the effective incorporation of technology; which also aids student academically across subject content areas in adherence to the learning standards and expectations of the Common Core Learning Standards.

Recommendations for Future Research

As the face of reading and writing continues to change, it will be necessary to offer children current ways in which to access literacy. Traditional printed books may not entirely go away, but accessing books through technology will be the norm as technology demands to be used. Despite the fact that current research exists about using technology to support literacy learning, there needs to be more done on ways to support struggling readers through the use of current technology. Research also needs to focus on ways students can be supported outside the school environment taking a student's home environment into consideration. As CCSS demands more of students, research needs to focus on how to maximize on students' potential literacy learning to meet the rigor of Standards. There are many ways research can be conducted to investigate how using eBook technology can support learners of all levels especially those learners that need extra support including struggling readers and non-readers.

Limitations

There were some limitations when I conducted my research. The first was the accessibility of technology. Arranging computer time was a big factor each day and this interfered with the time constraints. Accessibility also highlighted the limitations some teachers face on a daily basis. In order to be an effective teacher, accessibility to the necessary tools can

put limitations on 21st century student learning which is ultimately effecting student achievement.

Another limitation was the use of only two resources, BookFlix and Capstone Interactive Library. There are many other eBook resources such as MyOn through which the students in this study will be accessing their summer reading material. This resource has a pre-assessment and offers books to students based on their interest and also uses an assessment score. There are still other resources that may assist building fluency, supporting comprehension in order to motivate and engage readers.

The last limitation was the time constraint of six weeks. It would be interesting to conduct a longer study to see if using eBooks consistently with struggling readers during their independent reading time could significantly help these readers build confidence through increased exposure to books that engage them. Delving further into how these books might build fluency and help with comprehension would be the next step to fully investigate. Struggling readers should have access and opportunity to use every resource available to them to continue to support their literacy learning to meet the demands of the CCSS and to be college and career ready.

Final Thoughts

Literacy learning is changing due to the integration of computers and other technologies in the classroom. With multiple resources and information at our fingertips teachers are able to support every learner with different literacy experiences to make them successful. Being a certified teacher, I am committed to use all available resources to support student learning. I

have challenged myself to use new technologies and learn what each school has to offer. Learning about eBooks and how they can help students has given me options for student.

The one problem that concerns me is the lack of accessibility of technology in some schools as well as the quality of the hardware and issues with bandwidth. It is my thinking that students should have access to a computer all day. In the future, these children might have jobs that demand computer usage on a daily basis. Therefore, children should become acclimated to reading and writing on the computer. I agree with Bromley that reading and writing is changing. Already many people use the computer to communicate through email, blogs and other forms of writing. Paper and pencil may not entirely go away, but computers and cellular phones (also known as multimedia devices) seem to be the communication tools of choice. Young people are the leaders of change when it comes to communicating through digital and social media. Understanding this choice is something that I continue to process.

For me, I see these changes with my own daughter who is twelve years old. Social media is changing the way she communicates with her friends. In addition, she reads regularly on the computer or on her phone. She reads eBooks regularly and she also reads traditional printed media. Seeing this first hand, combined with my own practices of reading online and reading traditional print books, has made me realize the importance of mirroring this change in the classroom. Children must have the opportunity of being able to access literacy material through their mode of choice; and often when I teach the computer is requested. As a matter of fact, student choice is important when motivating students and may be the answer to engagement as well.

In the current educational environment in which the CCSS require much from children it seems that we should support children in their learning using 21st century tools as a part of the learning process and closing the digital divide. This is imperative for those children who do not have access to a computer outside of school. These children, in particular, need the practice most of all because they do not have the advantages other children do. Therefore, offering access in the school environment evens the opportunities that children have and supports their literacy learning. More importantly as we continue to make strides with technology children are becoming computer literate as well. I see literacy learning and technology going hand and hand, increasing the need for students to use the aforementioned together to maximize on student learning outcomes.

In order to support 21st century learning and to be globally competitive, children need the opportunity to interact with multiple literacies. Those children that struggle with reading and writing will benefit from the exposure to those tools that are available online, such as eBooks. As reading and writing continues to evolve, children will need to be supported in the classroom in order to become critically literate and be able to acquire the skills necessary to be college and career ready.

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Appendix A

Parent multiliteracy survey

1. Does your child like to read?
2. What does your child like to do? (List his/her interests)
3. How often does your child read?
4. Do you and your child read together?
5. What types of reading do you do? (Circle all that apply)

Books Newspapers Letters E-mails Magazines Newsletters

6. Do you have a computer?
7. If you answered yes to the question above. (Does your child use it?)

8. How technology savvy are you? List anything you use at home or work (ex. Facebook, blogs, twitter, (IM) instant messaging, iPad, cell phone, iPhone, Smart Board, Nook, Kindle)

9. How technology savvy is your child?

Appendix B

Student multiliteracy and interest survey

1. Do you like to read?
2. What kinds of genres are you interested in?
3. Do you read in your free time?
4. Do you think reading is only for school?
5. Do you think you are a good reader?
6. What strategies do you use when you do not understand a word?
7. What do you like to do?
8. Do you have a computer at home?
9. Do you use it daily?
10. What is your favorite subject and why?
11. Do you like videos or movies?
12. What other technology do you use? (ex. Facebook, blogs, twitter, (IM) instant messaging, iPad, cell phone, iPhone, Smart Board, Nook, Kindle)