The effect of new literacies and technology on student engagement and transforming the literacy block

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THE EFFECT OF NEW LITERACIES AND TECHNOLOGY ON STUDENT ENGAGEMENT AND TRANSFORMING THE LITERACY BLOCK

by

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Dedication

I would like to dedicate this manuscript to everyone who has supported me through the completion of this program.
Acknowledgements

I would like to express my appreciation for all professors who have offered me their support and guidance throughout this program and research. This program has helped shape me into an overall better educator, and I am ever thankful for the opportunity to participate in such an outstanding academic program. I also would like to acknowledge all of my colleagues, friends, and family who supported me through this program over the past two years.
Abstract

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THE EFFECT OF NEW LITERACIES AND TECHNOLOGY ON STUDENT ENGAGEMENT AND TRANSFORMING THE LITERACY BLOCK 2015-2016
Stephanie Abraham, Ph.D
Master of Arts in Reading Education

The purpose of this investigation was to investigate, track, and measure the effect of technology and new literacies on student engagement and the language arts block. Data was kept over a four-week period and tracked through student interviews, informal observations, and student work samples. Throughout the study, students showed growth in their ability to interact with technology and one another through the repeated use of technology and the use of new literacies. Data also showed increased student engagement through the independent work time of the literacy block.
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Chapter 1

Scope of Study

During my tenure as an educator, I have been in three very diverse educational settings. My first placement was in Baltimore County, Maryland. There my students had a one to one laptop ratio and a very advanced SmartBoard that came with remotes for each student as well as multiple programs. My first actual teaching job was in the city of Camden, New Jersey where my principal gave me a whiteboard and a marker and told me, "Good luck." My current position is a mixture of those two things, where I have a short throw and access to some technology. I have learned a lot about technology from these experiences, and I have always been a go-to person in my career and family when it comes to using technology. I have seen the positive impact that technology can have on the daily lives of students. While in my second year in Camden, my class received a full laptop cart through a grant. With this laptop cart, my students participated in online programs such as Kidblogs, Edmodo, and Moodle. Students completed assignments, commented to one another, and learned the ins and outs of each site and the importance of technology as a whole. My students gained automaticity, familiarity with technology, and the related literacies over a short period. I saw engagement and full attention from students who, before these strategies, were unengaged or unwilling to participate.

Currently, I teach in an upper-middle-class suburban school district as a special educator. Prior to starting this position, I assumed that schools in better neighborhoods had better access to technology. I thought students would be more literate in any form of technology as I had assumed they would have used it in the younger grades. My assumption was that they would have more access at home, and their teachers would have
integrated technology since at least the third grade. What I saw was a much different story. My fifth-grade class had received their first cart of laptops a month after I began in September 2014. The teaching that I saw did not integrate technology or new literacies in any way, in fact, teachers thought it was a triumph if students typed final pieces on the laptop and saved them correctly to their flash drive. To me, this was not enough. As a first-year teacher and the special educator in the room, I tried as much as I could to integrate learning and teaching with technology. As time went on, I realized many teachers didn’t have the knowledge, the training, or the will to integrate technology or new literacies into their classroom. I saw many missed opportunities for students to grow and learn and interact in different ways not only in language arts, but also in every subject.

In 2015, I moved to a second-grade classroom as a full time in class Special Educator. Prior to this, I had moved around to different classrooms and grades throughout the day. I had never taught in a primary grade, but I knew that the students had to begin to have the opportunity to learn with technology to function in this digital world. I had seen the abilities of the fifth-grade class the year prior and knew that if I started with the second graders, they would eventually grow to be more knowledgeable by the time they were in fifth grade and on their way to middle school.

Based on my experiences in the past five years with technology integration and new literacies in the classroom, I chose to target the use of these in my second-grade language arts classroom and see the effect it had on student engagement.
Story of the Question

After four years of teaching, I began to notice that engaging and valuable lessons were missed due to the lack of technology integration in the classroom. Students were not being prepared as well as they needed to be for their future as digital citizens. Every job in today's world requires the use of digital communication and technology. I knew how important these skills were, and how engaging and easy they were to implement with the correct framework and release of responsibility. I also knew just how important they would be for my students in the future. In an attempt to prepare my students for their future as digital citizens, I chose to highlight and use technology and new literacies in my second-grade classroom and observe how it engages students while increasing their automaticity and ease of use with these new literacies.

Statement of the Problem

The question that I investigated was: What happens when classrooms integrate new literacies, such as computer programs, literacy apps, and student response systems into daily Language Arts instruction, and how does this integration affect student engagement? Many teachers today use the ‘old wine in the new bottle' thought process. Examples of this are taking a writing task and having students write it in a word processing program. Yes, the technology is new, but are the engagement and the outcome new? No. Teachers must rise to the occasion and create a "new generation of engaging assignments that leverage the full power of the internet and the power of the technology, so students are learning to use the tools to think more deeply” (Colvin, 2013, p. 65). Changing the assignment from paper and pencil to the computer does have its advantages. Students need to know how to type; students need to know how to interact
on a very basic level with the computer. This practice only scratches the surface of what is possible, and what should be done in the classroom.

Participating in these standalone practices is not only a poor use of our in class technology, but it is also out of sync with nationally set forth technology standards. There are six standards set forth by the International Society for Technology in Education (ISTE). Although students are not required to meet these standards, teachers should use them as a guide when planning for best practice. Using ‘standalone' technology, as Calvert (2015) refers to it, is not meeting the requirements of these standards. The headings of these standards as seen on the ISTE website are:

- Creativity and innovation
- Communication and collaboration
- Research, and information fluency
- Critical thinking problem solving and decision-making
- Digital citizenship
- Technology operations and concepts (ISTE, 2007)

In looking deeper into these standards, it is more than obvious that standalone technology, such as described earlier in this section, is not meeting the needs of these standards and is not the best way to educate our students for their future technology needs. Three of the standards set forth from the ISTE were taken into consideration when beginning research for this study. Before this implementation, my students had little to no experience with technology in the classroom, so the focus was on technology operations and concepts and digital citizenship. Throughout this study, communication and collaboration were addressed as well, with groups.
A major issue when it comes to technology in the classroom is what Calvert called “technology integration” versus “curricular integration” (2015, p.148). The difference between the two is that technology integration is separate from the curriculum, while curriculum integration is when technology being used cannot be separated from the lesson being taught. Teachers are not trying to teach technology, as a computer teacher or STEM teacher may be; teachers are focused on teaching the content of their classroom. With the addition of these new technologies, the student becomes not only better at using technology, but also better, at the content that is being taught. Technology integration can be seen as a burden, an extra ‘thing' that has to be tacked on to a lesson, while curricular integration enhances the experience and adds to what is already being taught.

One aspect of the ISTE standards that is not addressed through standalone technology is communication and collaboration. A student’s interaction with the technology has a much larger impact on learning that just using the actual hardware. This is where teachers have an opportunity to have students interact with multiple/ new literacies. Using standalone technology, and not using technology correctly, is something that I often see in classrooms.

My experiences and further reading into these topics are what lead led me to want to research and study the effects of new literacy and technology in the classroom. I also wanted to look at the effect on student engagement, as I felt using these different literacies presented a time where students would feel more engaged during lessons. Synthesizing all of the research I had read, I was interested and excited to see the impact that this would have on my classroom of students.
Statement of the Research Question

In today’s classrooms, it is essential that students know how to use new technologies and become familiar with the new ideas behind it. Without these skills, students are ill-prepared for the careers and interactions that are sure to be part of their future. Introduction to technology and the beginning of new literacies is important at a young age. If students start at a younger age with these new literacies and technology, they will be more capable of completing increasingly complex tasks as they get older. Yes, today's students are called ‘digital citizens' since they were born in a time where technology is engrained in daily life. Knowing how to use technology such as an iPad, or video game does not mean that they are ready to use these items to the extent necessary in the classroom or the workforce.

Based on these ideas, I address the following question: What happens when classrooms integrate new literacies, such as computer programs, literacy apps, and student response systems into daily Language Arts instruction? I will also be looking at the engagement of students during this time, as opposed to instruction before the start of the study. For this study, I carefully collected data and track my students as they interact with a new way of learning, and how they feel it has impacted their instruction.

Organization of Thesis

Chapter two investigated the available literature about the use of technology and new literacies in the classroom. Chapter three describes the methodology and design of the study during its implementation, as well as a full scope of the classroom and environment, including students, that participate in the study. Chapter four will look at the research and data of the study as well as its outcome. Chapter five will present the
conclusions of the study and what implications it has for the future of the classroom and research in regards to using technology and new literacies in the classroom.
Chapter 2

Literature Review

Integration of Technology in Language Arts

In today's fast-paced world of Internet technology, digital devices, web 2.0 and beyond, teachers strive to integrate technology into their practice. Still, “schools are recognizable institutions that haven’t changed much over time, despite the many technological advances of the 20th century and the first decade of the 21st century” (Wosley & Grisham, 2015, p. 168). Educators must replace this lack of change with instruction and activities that more fully prepare students for their future, and improve the quality and relevance of their education. Chapter two presents an overview of what technology and new literacies are, the benefits of their use in language arts instruction, as well as how this integration could assist in student engagement and the transformation of the language arts period. The first section reviews new literacies and why they educators use them in the classroom, and how educators misuse them. The next section reviews ideas of how to integrate technology into classroom instruction. The third highlights the benefits of using new literacies and technology in language arts instruction, showing an apparent benefit of their use in the classroom. Finally, the effect technology has on engagement is examined to expand further on the benefits of these in classroom use. The chapter highlights current literature and how this study may assist in the furthering of technology and new literacy applications in the elementary classroom.

Why Use New Literacies in the Classroom?

This study examined both of these interpretations of ‘new literacies' and how that applied to the class. These literacies are ‘new' in the way that literacy is thought about by
professionals. Lankshear and Knobel (2001) state that the new literacies focus on the ontological shift from ‘post typographic’ forms of text to new, less conventional practices. “The argument is that contemporary changes have impacted on social practices in all of the main areas of everyday life within modern societies: in work, at leisure, in the home, in education in the community, and in the public sphere” (Lankshear and Knobel, 2001, p.28). From this, the theorists mean that these new literacies are essential not only because they are impacting the classroom, but also they are changing a wider scope of many people's lifestyles. The theory of new literacies focuses on the extensive growth of technology and communication and its effect on our everyday lives.

Regarding the words ‘technology' and ‘new literacies,’ there are many applications related to the classroom. The Theory of New Literacies has two different types of conventions when it comes to describing the technology and new literacies. Technology would fall under their categorization of the ‘Technical Stuff’. In every century, there are different technologies that emerge that we perceive as ‘new’. In earlier centuries, this could have been the printing press, the typewriter, or in the 20th Century, the early stages of the computer. We classify this in the category of ‘technical stuff’ because it is new, and what is in use that is different. In today's world, we would recognize the new technical stuff to include items such as the Internet, tablets, smart boards, touch screen devices, as well as modern-day computers. We classify this as the technical stuff because they are the transmitters that in use for the ethos stuff. Using technology as a standalone, without integrating the new ethos, is what Lankshear & Noble (2003) called “putting old wine in a new bottle” (p. 67). By this statement, they meant that these new technologies should not be used to further the same old instruction.
It would take the integration of the ethos stuff for the technology to be a true use of a new literacy.

The ‘ethos stuff’ would be, to put in the words of the theorists, using a new bottle to distribute new wine. The general process is the same, but it is refined to meet the needs of the new era. The ethos stuff is what happens when you use the new technology to enhance and transform the experience. For example, the flat classroom, which allowed students to communicate with other students across the country and world via a webcam to work together on a project. This project took Web 2.0 tools such as computers and The Internet and used them to collaborate distribute and participate in conversations across the world. Using technology in ways such as this takes the technical stuff and uses it in a manner that transforms instruction and prepares students to be digital citizens. Wilbur (2012) wrote that an example of using new technology in the same way that you would use old technology would be to use a SmartBoard as a glorified whiteboard. Teachers writing on the board with markers and using it to put information out to students is not doing the technology any justice. Using it as a tool where teachers and pupils can create and learn from accessing the Internet and creating different modalities would be a combination of the ‘Ethos stuff’ and the ‘Technical stuff’.

O’Mara and Laidlaw (2011) documented the comparison of out of school technology used by children versus the in school technologies that happen during the same timeframe. Their goal was to see how home technology effected the possibilities of teaching with technology in the classroom environment. They reflect that when new technology is brought into a learning environment, the focus is on the technology, and not so much on the applications for its further use. This is something that we see often.
More often than not, school districts focus “on the allure of 'new devices' and less so on how these new technologies might change the nature of texts, curricular engagements and the relationships among students in classrooms” (O’Mara & Laidlaw, 2011, p. 151). Instead of this, educators need to analyze these tools on their own, while taking into account the opportunities that they present for their classroom regarding engagement and curriculum.

Many studies have investigated the use of technology in the classroom. Grisham and Wosley (2006) analyzed how threaded student responses, completed on a social media learning platform, pertaining to literature significantly increased the quality of student work versus teacher driven responses. Sixth-grade students logged on and would comment on a format similar to Facebook, where their comments and replies to one another would be visible and threaded. The teachers scaffolded the activity, providing students with weeks of instruction before their posts. They were educated in netiquette, and given guidelines for what type of posts were expected regarding the content that should and should not be posted. From here, students worked together bouncing off of one another to find meaning from a text, as opposed to just writing a response to the teacher. From comparing data that was taken before and during the study the researchers saw that student responses had improved exponentially. When directing responses to teachers, students would respond with an overview of the text with perhaps an inference and a prediction at best. When given the format to reply to one another, and feed off of one another, students were thinking more critically, analyzing the text with more detail, and created their positive learning community. This is just one example of how new
literacies and student-learning collaboration can increase the level of students learning and the work that they are creating.

**How Can Technology be Integrated Into Daily Instruction?**

One of the oppositions to technology in the classroom is that it takes too much time to teach "technology" during the school day. After teaching for four years, I have observed that many educators see technology as a time-consuming add on to their regular day. Using new literacies in conjunction with technology separates things for technology time and curriculum time. Calvert (2015) discussed the many benefits of technology, and how it can be done easily in a 21st-century classroom. First, technology versus curriculum needs to be addressed. The benefits that will be explored in this chapter must come with the footnote that they are not ‘stand alone', and they must be taken into consideration during every facet of instruction.

To assist teachers in integrating technology and new literacies more efficiently, Puentedura (2014) created the SAMR Model. SAMR is an acronym for Substitution, Augmentation, Modification and Redefinition. This is a scale or matrix that teachers can use when using technology in their classroom. The first two levels (SA) are keeping the ethos the same while adding the new technical aspect; the second (MR) are where the new literacies and ethos become more relevant. The final stages of modification and redefinition are where teachers should aim to be, and where the actual transformation of the lesson occurs. During these segments, students should be participating in activities that can't occur without the technology, such as taking part in a wiki or chat, or creating a digital image based off of what they have read. On a different side, students could be chatting with each other on a social media education program such as Edmodo, uploading
and reading each other’s documents remotely, or recording and listening to each other read different stories. Even creating online versions of their stories with pictures pulled from websites and a real life e-book feel would transform the writing process in a way that would not be possible in a time before our more digital society was present.

Using the SAMR as well as other frameworks as a guide, classroom technology and new literacy integration should not be complicated; it should enhance instruction and make learning more meaningful. If teachers are going to prepare students for digital literacy they can’t replace old techniques with new technology, but rather transform and integrate, using curriculum and technology are one in the same.

**What are the Benefits of New Literacies and Technology Integration?**

Another advantage of using technology and new literacies is the option to help struggling readers at all times, not just when the teacher can find them or pull them to a small group. Hearing examples of fluent reading is something that struggling readers benefit from. Struggling readers need a model for fluency and still need to develop higher order thinking skills even if they cannot read the text at a higher level. Larson (2015) states that the use of audiobooks can strengthen overall literacy development in children learning to read. With the use of technology, audiobooks are much more readily available in all formats. It cannot be ignored that "daily exposure to read-aloud presents students with opportunities to hear explicit modeling of the fluency elements (e.g., accuracy, automaticity, prosody) that proficient readers exhibit" (Thoermer & Williams, 2012, p. 442). Logistically, it would be hard for a teacher to read aloud to all of her students several times a day. With audiobooks in any format, students can listen to fluent reading more often which would have a very positive impact on their fluency.
Another aspect of new literacies and technology is student response, commenting and collaboration through a social format such as Twitter, TodaysMeet, KidBlogs, Edmodo, etc. This would fall under the Redefinition column in SAMR as in its truest form, meaning this could not take place without the assistance of technology in the classroom. These platforms allow students to step outside of the formal learning environment and engage with a task. Drawing from this, Greenhow and Gleason (2012) speculate new literacies effect language arts instruction in several ways. These include motivation and engagement with the lesson, frequent interaction with the instructor that will provide feedback and mentoring, as well as relaxed styles that allow for risk-taking (Greenhow & Gleason, 2012, p. 473).

Stover, Yearta and Harris (2016) completed another recent study revolving around new literacies, more specifically blogging. Through their study, a teacher, Ms. Whitmore, had her students blog as a way of creating online book clubs. Ms. Whitmore had several groups of students in her class reading different novels. Instead of assigning the groups a time to meet, she hosted the book discussions online. The thought process of this was that students could then “post their thinking and communicate about the text anytime from anywhere within a blog” (Stover, Yearta & Harris, 2016, p. 378). This was a true experience of new literacies for the students, as they experienced first hand the nature of today's hyper connected world where time and space do not come into play when thinking of collaboration across time zones. From this experiment, Ms. Whitmore discovered that not only did students get to collaborate without the restraint of time, but they also developed as “independent and reflective readers as a result of book club blogging” (Stover, Yearta & Harris, 2016, p. 379). The students being more reflective
allowed their discussions online to be more worthwhile than those that had occurred prior to them beginning to blog. Furthermore, students who in face-to-face discussions who were quiet during the weekly scheduled meetings became much more active and involved in the class discussion when it was turned online. Throughout the process as a whole students became more independent and thoughtful readers and responders. This study showed how the implementation of new literacies, both the ethos and technology, and transform a normal lesson into a much more worthwhile use of student time.

**How Can Technology and New Literacies Effect Student Engagement?**

Often, student engagement is an afterthought, even though many studies today show that engagement trumps all. “High levels of engagement distinguish higher performing classrooms from lower performing classrooms” (Parsons, Malloy, Parsons, & Burrowbridge, 2015, p. 224). More engaged students are likely to retain information and want to know more. As if that wasn't enough, "international data, as well as US data, has shown that reading engagement could compensate for low socioeconomic status and family educational background" (Parsons, Malloy, Parsons, & Burrowbridge, 2015, p. 224).

When these researchers probed students for what they thought made a lesson engaging, they found two things. Activities that allow them to collaborate and activities provided with appropriate support, such as correlating activities to student ability. The least engaging activities were those that required a student to think very little, fill out worksheets, to find the ‘right' answer and those that involved too little involvement.

When looking at the strategies that students state are engaging, it is easy to picture how new literacies and technology integration would be engaging for all students. Most
activities that involve new literacies include some form of collaboration. Student’s engagement level would increase if given the opportunity to read and mark an e-book with the plan to write a blog post and then comment on others. It is not the use of the devices that makes this engaging, but the ‘ethos stuff’ such as the collaboration, higher level thinking skills, and creativity that it involved.

A study, conducted by Ciampa (2013) addressed just this. The researcher wanted to investigate the effect of technology and collaboration on student motivation. In several sixth grade classrooms, Ciampa studied the effect of tablets and collaboration on student motivation. This study founded that the tablet served as motivation, not only because of the hardware, but also due to the experiences that it provided for various students at different ability levels. The students could use the mobile tablets to collaborate with one another in ways that they never had before. The tablet and technology available also allowed students to work collaboratively with one another and could assist in grouping with lower and higher level students. The teachers saw that “the use of mobile technology… markedly improved student learning outcomes and promoted greater motivation to persist on tasks” (Ciampa, 2013, p. 91). Overall, this study provided evidence that motivation is an important factor for student learning. Motivation will increase not only from the use of technologies but also from the use of new literacies and student collaboration. When motivated and prepared, "individuals can share thoughts and ideas and become active participants in a digital society and develop the skills of cooperation and collaboration” (Ciampa, 2013, p. 94).

Technology in itself is not engaging enough. Using new literacies to keep students engaged will improve overall student learning. Even a student who is a low
reader will be an asset to collaboration when fully engaged. Engagement stretches further than the initial steps; integration should occur across all parts of teaching.

**Conclusion**

After reviewing the literature, it is clear that integrating technology into literacy instruction is not only beneficial, it is essential. At times, lack of technology integration may be due to lack of teacher knowledge, or lack of experience of those in the district in which the teacher is working. New literacies and technology will prepare students for the workforce. It will do this by using collaboration and creative strategies that apply in the 21st century, and allowing students to build a background in using different kinds of devices. Technology and new literacies will also allow for more student engagement. Student engagement is essential to produce students who are interested, driven and successful in any subject. Students will be engaged by collaborating and working hard to achieve something new that is dependent on the technology that they have.

This study’s goal was to discover how technology and new literacies can transform the language arts reading block in a second-grade classroom. At the beginning of the study, students had had very little interaction with technology and the only available technology sources were netbooks and two desktop computers. The goal of the full implementation was to hopefully not only make them more digitally savvy but also engage them so they were growing as readers and learners.
Chapter 3
Research Design/ Methodology

The framework of this study is qualitative research. Often researchers use this method when analyzing data collected school settings. Teacher research is defined as "research that is initiated and carried out by teachers in their classrooms and schools. Teachers researchers use their inquiries to study everything" (Shagoury & Power, 2012, p. 2). The purpose of qualitative teacher research is for teachers to unearth and question their practices about teaching and the classroom. This type of data differs from its counterpart, quantitative research, as quantitative research measures "data, knowledge, evidence and effectiveness" (Cochran-Smith & Lytle, 2009, p. 46) through the use of numerical data keeping strategies. Many consider quantitative research a more exact science, with a lack of objectivity, where qualitative research takes into consideration researcher subjectivity. A classroom, with its diverse needs and students, is difficult to articulate as an exact science. Teacher researchers cannot be objective, due to the many idiosyncrasies of a classroom such as student needs, backgrounds, and overall school culture. Also, teachers have a vested interest in their classroom, which makes it difficult for teachers to separate themselves from the research setting. Instead, teachers must realize their subjectivities and be reflective, considering the learning environment, the teacher practices, and the students' needs as individuals.

The focus of teacher research is to examine current classroom practices and keep track of them in various forms of data to reflect and eventually enact change in the classroom. Researching one's own practice is meant to improve classroom practice and student outcome. "Observing students carefully, analyzing their needs, and adjusting
curriculum to fit the needs of all students have always been important skills demonstrated by fine teachers” (Shagoury & Power, 2012, p. 3). Conducting teacher research is just an extension of excellent teaching that takes into account the needs of all students, and the outcome that the teacher desires. This form of practitioner research centers on teachers and their attempt to understand learning from the perspective of students.

During a qualitative teacher research study, the evaluation occurs on both the teacher and students. “One feature of every form of practitioner inquiry has in common is that the practitioner himself or herself simultaneously takes on the role of the researcher” (Cochran-Smith & Lytle, 2009, p. 41). This means that teachers work in their classrooms, or places where they are stakeholders, to work to change issues that prevent students from learning to the best of their ability. Stakeholders change practices by qualitatively listening to the feedback from their research and its effect on their students.

This study analyzes results of implementing new literacies and technology use into a second-grade language arts literacy block. The purpose of this strategy is to prepare students to be digital citizens in a world where their ability to use these new technologies and new literacies will affect their future academic and career success. In order to gather and track data the teacher research paradigm will be used. Since I studied students and how instruction can change their experience in the classroom over time, this research study aligns with the teacher research framework. The qualitative inquiry strategies used to conduct this study include student questionnaires, group discussions, student projects and artifacts, and my personal teacher-research journal.
Procedure of Study

Prior to the beginning of the study I observed the language arts block and how it was conducted. I observed how I approached the lesson, and how I planned for the use of technology. I analyzed the language arts block for timing, since getting students on the computers and logged on had to be taken into consideration when planning the lesson. The lesson block in total is seventy-five minutes, so student time had to be used in the most effective manner.

After this observation period, the practical use of technology in the classroom was decided upon. I knew that I wanted to use websites, virtual class discussions, and student blogs as starters for integration. I decided that this would have to all take place, at first, during various parts of the reading block. Importance was placed on the careful release of responsibility since all of this was new to the students. The goal was to move eventually away from the whole class model and have more autonomy and ownership from the students. I decided to start small with the technology integration while still keeping the trends of the new literacy, and then work up to student blogs and commenting as a culminating activity for the study. First, I had to see how students reacted to their computers and tested their background of dealing with digital devices. We originally had two desktop computers in the classroom, and logging in was sometimes a struggle. I used explicit instruction to prevent future tech issues before full implementation.

Data Sources

When it came to data collection for this study, gathering information from the students was paramount. They would be the ones that could give me the most
information about their interaction with technology. To begin the study, I began telling students the purpose of participation. It was important for them to notice the differences going on in the classroom, to compare what was occurring in class before the implementation, as opposed to after the study started. I did not feel the need to audio record these situations, so I did one on one interviews and class discussions while taking notes and writing vignettes after each encounter. Over the course of the four-week study, I met 11 times with student groups of 2-4. My teacher research journal was something that I would often reference, and look to when seeing the transformation over the weeks of the study. Throughout this journal, I reflected not only on the progress and status of the class but also my feelings while teaching. I tracked student work such as their blogs to see how their work progressed during the study.

**Context**

**Community.** Birches Elementary School is one of six elementary schools in the Washington Township public school district. At the 2010 United States Census, there were 48,559 people, 17,287 households, and 13,328 families residing in the township living in 17,810 housing units. The average household size was 2.80, and the average family size was 3.23. About 2.6% of families and 3.9% of the population were below the poverty line. Of all households, 34.3% had children under the age of 18 living with them, 61.4% were married couples living together, 11.6% had a female householder with no husband present, and 22.9% were non-families. The racial makeup of the township was 87.70% White, 5.82% Black or African-American, 0.11% Native American, 3.78% Asian, Pacific Islander, 0.85% (from other races, and 1.72 from two or more races). Hispanics or Latinos of any race were 3.65% of the population.
School. Birches Elementary serves approximately 450 students, and the racial makeup is as follows: 83.5% White, 5.2% Black, 4.8% Asian, 4.4% Hispanic, and 2.0% Two or More Races. Economically Disadvantaged students make up 20% of the population, and Students with Disabilities make up 21%, and 0 students are limited in English Proficiency. In regards to state testing, 78% of students are proficient in Language Arts, and 90% of students were proficient in Math.

Ms. Schlupp and Ms. Minton's class consists of 18-second grade students who range from 7-8 in age. Out of the 18 students, 7 are female, and 11 are male. The makeup of the classroom is mainly white, with four students of mixed race, and the rest Caucasian. Of the 4 mixed students, 1 is Caucasian and Asian, 2 are Hispanic and African American, and 1 is African American and Caucasian. Four students have Individualized Education Plans (IEPs) in the class. There is one student who is Communications Impaired (CI), one student who is Emotionally Disturbed (ED), and two students that are Other Health Impaired (OHE).

Students. The overall behavior of the class is extremely agreeable. Most students follow directions when they are given, and overall the class is extremely peaceful and comfortable to manage. Academically, the students are slightly below grade level. There are 5 or 6 students who are more advanced and on a higher level, and the students with IEP's and some others are in need of daily intervention during the reading and math blocks. One student was retained in first grade and one student who transferred in to the class in October.

Ryah, Tim, Bryan, and Melissa are the students with IEP's. Ryah is an extremely personable and bubbly student who struggles in all areas academically. She does not like
corrections and will shut down for small amounts of time, but is a student who aims to please and works hard. She is very talkative, and this sometimes gets in the way of her academics. Tim is a student who is diagnosed Attention Deficit Hyperactive Disorder and shows all typical signs of an undedicated student with this diagnosis. He is very active and has a hard time keeping to himself and sitting at his desk. Bryan is a student with frequent and paralyzing shut-downs. He is classified as ED and at his last psych exam was classified as having the communication ability of a 2.4-year-old child. He loves penguins and will share openly when it comes to this topic. Melissa is a student who is classified as CI. She is extremely quiet, but she does her work and works hard. She sometimes will not know what she is doing and not ask, leaving her sitting for minutes not doing any work.

Students in the class are well behaved and get along with one another. Students are active with other students inside and outside of school through co-curricular activities such as football, girl scouts, and little league/ softball. The school has a bullying program in place, so students are open about any incidents, and barely any are ever reported in the class or school as a whole.

The classroom is a very bright and open learning space. Students' needs are met by both teachers and the teacher's aide who is in the classroom to work with Bryan. Students are frequently working in groups and making crafts or projects based on their learning. There are ample examples of student work in the room and the hallways. Students have ownership of the classroom with classroom jobs, and keep their space clean and know that it is their responsibility to be an active participant in the room. During Literacy and Math students, rotate in small group intensive instruction and
practice skills that assist them in these subjects. The teacher teaches from a short throw projector, which mimics the use of a smart board projector.

Chapter Four of this thesis discusses the results of the student interviews, class discussions, the teacher vignettes and analyzing of student data. Chapter Five then presents the conclusions and implications for further study, as well as projections for further study on this topic.
Chapter 4

Data Analysis

This chapter discusses the outcome of my study in relation to the question: How will using new literacies and technology in the classroom transform the literacy block and promote student engagement? My data sources were as follows: an anecdotal teacher journal, baseline data, student interviews, student work samples, as well as an exit questionnaire. All of these data points combined allowed me to gather a sufficient amount of data and report on my findings. Looking at all of the class data points, several trends began to emerge. These trends were: increased ease with technology, student interaction involving technology, heightened engagement and several other gains that were unexpected during this study.

Revisiting the Study

As chapter three previously explained, this study covered a four-week period in which students in which exposure to technology increased and new literacies in the classroom. During the first week of the study, I studied the baseline data of the literacy block (guided and whole class instruction). Using baseline data, I planned for my changed instruction, as well as compared and contrasted the beginning and ending data of this study. By recording the baseline data, I made clear connections from the beginning of the study to how students, and the block, in general, had changed from the start of the study. I used journaling to record and analyze student interview questions, anecdotal observations as well as casual conversations throughout the study. I was looking for the growth of students in regards to their ease with technology, their engagement during the
literacy block, and their interactions with one another using new literacies. I used a student exit survey to gather final data from the study and thoughts from the students.

**Baseline Data and Entrance Observations**

Before the integration of the study had started, I looked at the baseline data of the literacy block. By baseline data, I mean data, collected before the study in the classroom began. This was taken so the before and after of student engagement and ability could be compared. Until this point in the year, little thought or preparation was put into the reading block, outside of guided reading groups and whole group instruction. Guided reading groups and small group instruction were given an enormous amount of thought and effort, but ‘seat work’ for students that were not being met with was not planned for specifically. I saw that seatwork for these students could vary from handwriting to math worksheets and anything in between. What I saw was that during seatwork students were uninterested or unmotivated. The time that they could have been engaging with one another, or with technology, was being wasted. I knew that students who were unengaged in meaningless tasks were missing chances to grow as readers, and I planned on capitalizing on this seat work time, as well as whole group instruction, by increasing student engagement.

I also saw a lack of use technology overall in the classroom. In the second marking period, I introduced a math computer program that students used once a day. Students logged on by themselves, and once they were on, they needed many directions to understand what was happening with the program. These were simple troubleshooting and login issues that I had assumed they would have been capable of navigating on their own. I thought that my students should know more about these essential day-to-day tasks.
that involved technology, so I was determined to fix them. I had worked in the fifth grade the year prior, so I knew that students in that grade did not have proficient technology abilities. I knew that if I started these students younger, there would be a greater chance of the students having more automaticity when it came to technology, and would accomplish larger tasks that what I had seen the fifth-grade students achieve.

**Troubleshooting/ Introduction to Technology**

Before the beginning of this study, little to no technology was being used in my classroom. Administrators told the staff that the laptop carts in the building were to be used for the testing grades, grades 3, 4, 5. The first month of school, one of the two desktop computers that were available to us in our classroom full time crashed, making it unusable. This led me to the first problem of the study that was the availability of technology. Finally, I realized that there was a cart available for the younger grades that was not yet in use. I was very excited at the availability, and what it was going to mean for the importance of my study and the impact it was going to have on my students.

The day that the study began, I started with an interview with five of my students. We had a conversation about computers, our classroom, and reading. The most common answer to “Where do we use computers in school?” was “In computer class” (Journal Entry, October 24 2015). From this, I knew that the student's experience with computers in the classroom was limited and that none of them had had the ability to use laptops in first grade. From this point, I noted that it would be slightly harder than I had anticipated to get the students up and running on their own with the computers. Not only would they have to log on, but also they would have to use the Internet and navigate the Blendspace that would be the platform they would interact with to get to the software for this study.
Blendspace is a platform that organizes different teacher resources and makes websites, documents, and programs all accessible to students by accessing just one page. This made instruction navigation of the computer much easier for me and was easy for students to understand.

Students began with turning on the computer and logging on with a uniform password and login. This was the way that I worked around their individual usernames, and would negate the need for students to have to type in long HTML codes. On this first-day, students had to log in, access a shared drive and then click on a link to get them to a Blendspace platform. From there, students would access a blog, log in, and comment on a post made by me. This, I thought, was a reasonable amount of work for one-half hour period during the reading block. The time that I had anticipated it taking was thirty minutes; it ended up taking closer to an hour. From this point on, I saw that it may take more time than anticipated for students to get to the automaticity stage of the study. In my observation journal, I noted it was more difficult for students to log in than it was to navigate the computers. I was showing the exact mimic of what they were doing on the computer on the projector, which made it easier in some respects.

Overall, the beginning days of troubleshooting and becoming accustomed to technology were growing pains that made the rest of this study very successful. By the end of the study, students had several passwords, logins, and multi-step directions that they completed solely on their own. The ease with which they could use the computers made it easier to continue the study, and expand upon the technology use during the four weeks, and for months to come during this school year.
New Literacy Observations and Daily Use

Following the beginning days of this study, where much time was spent physically getting students on to the computers, the new literacies aspect of the study began. Throughout the course of the study, it was my goal to incorporate these new literacies as often as possible into the student schedule. Sadly, in the time given for this study there seemed to be so many other roadblocks to getting in the way that this goal fell slightly short. Students did use new literacies, and two examples are shown in depth, but this was not nearly to the extent that I would have liked them to interact with the new literacies. Looking back on the study it seemed that at such a young age, with so many other things going on, the technology took precedence. Although disappointed with these results, the times that I did get to do some new literacies with my students were impactful and meaningful to the study. Although students did not interact with the new literacies as often as I would have liked, they did get to interact with the technology in many ways, which lead to many added benefits of the study.

A powerful example of the technology in the study was the ability of the students to log in to the Blendspace, and pick from a plethora of activities such as listening to fluent readers, word work activities, and vocabulary. When not working in small groups, students used the computers and worked individually. The most popular of the online activities was Storylineonlinel.com, where students would listen to a book being read aloud to them through a YouTube video recorded for the website. Students logged on by themselves, chose a book from the virtual library and listened through headphones anywhere in the room. This was a great exercise for them developmentally, since we focus on fluency and its importance very heavily. Also, this great exercise showed me
automaticity in students and comfort of use when it came to technology. Other activities were helpful as well but this activity students mentioned explicitly to me when conferencing, as I will detail later in this chapter.

Technology use was key in this study, but the use of new literacies was the aspect that was the most exciting and impactful. One powerful example of new literacies in this study was the use of todaysmeet.com. Todaysmeet.com is a website where platform similar to a ‘chat room' is created. Students logged on using a URL code that they received from the Blendspace. For this activity, students in groups completed work.

Students were studying character change throughout the story ‘Where is Kitty’ and I thought it would be influential to do this in a partner setting. Students used the social format of partnership, as well as the technology to enhance their discussion not only with their partners but also with the class. Students analyzed the way a character's feelings changes through studying Anna and the day where she looses her cat. Students had read the book in partners where, with the help of a graphic organizer, analyzed how she changed over the course of the book. Students did this by making inferences based off of text and pictures, and discussing with their partner before posting to the web page. Once posted, students could see others responses to the post, and talk with their partner about how their feeling may have been different than the one that the other groups chose. One group would then go to the front of the room, where the webpage was projected, and facilitate a discussion about why the groups chose the feeling that they did. Below is an example of the responses to one of the questions from this lesson. Students worked in groups to establish how she felt at the end of the story. They then entered the feeling they chose on to the page, and discussed the feelings that others had been posting. When
all groups had, responded one student went to the front of the room and asked for
evidence from each group to support their chosen feeling. Students were very quick to
share what they had found, and were eager to want to share on the web page again.

Figure 1. Screenshot of Todaysmeet.com

It was from here that I began to notice how the collaboration of students, literacy, and
technology could change a lesson. I planned this lesson originally as a teacher-led lesson,
asking individual students what they believed the feeling of the character was. Changing
it to a more social and technological lesson made the discussion and the output of the
students much more meaningful. Looking back, this could have been done without the
use of the laptops or computers, but they did add something the overall feeling of the
lesson. Students were excited and felt that they were in charge of the lesson, which made
it more meaningful and worthwhile to them.
Using blogs in the classroom. Another major aspect of this study that involved new literacies was the use of the student blogs. Although over the course of the study, we completed only two blogs the students still created, and took ownership of a real social experience using technology. The goal of this aspect of the study was to have students create an online space on their own where they could post about a book that they read, and others would comment on it. Before the study started, I showed students real life examples of blogs such as teaching blogs or recipe blogs that many people use frequently. I thought this would give them context for what they were doing, and what it could mean for them in the future. They were excited to get started and see what they were creating. This was surprising to me at first, but then I realized that they had most likely created a book report before this, but they may never have had the opportunity to comment on someone's work in a digital way. These students were younger than I would imagine those who can use social media such as Facebook, so this was their first real interaction with commenting and replying to someone else's comment on their work. In an exit interview with several students (November 9, 2015) they stated that commenting was their favorite part of the blog, and they could not wait to get to do another one. They asked often when they would get to write another post.

Ryan: I liked reading what books my friends were reading and writing to them about the book.

Luke: I did not know that Vincent read my book before, and he commented that he did, and it was cool.

The process of beginning to blog took quite some time due to the student’s background with using computers as a whole class. Students had a laptop on his or her
desk, and it was my responsibility to help them when something went wrong with the technology. After discussing what blogs were, why we write them, and showing examples I wrote my own blog post for the book *The Pigeon Needs a Bath* since it was a book I knew that they had all read in library. I started by explaining what a book report was, and showed examples from the ‘Spaghetti Book Club’ website, where students can write and publish book reviews online. From there I wrote my own blog post following the format of introduction of author and illustrator, a short summary without giving away the ending, my favorite part, and whether I would recommend this book and to who. From watching me model students knew the expectation, as well as some of the steps it would take to get their blog published on the class website. I then had my co-teacher comment on my blog in real time so students could see how commenting and posting looked on the website. After my example, students were excited to start their own posts, and begin commenting.

Below are examples of student blog posts and comments. This demonstrates the capability of a second grader to create and publish their blog. The students came far from the beginning of the study where it was hard for them to even login. I gave students guidelines for the post, which required them to add the author, illustrator, a short summary and their favorite part or who they would recommend the book to.
Mr. Docker is Off His Rocker

By Michael on Nov 20, 2015

This book is called Mr. Docker is off his rocker by Dan Gutman and pictures by Jim Paillot. The book is about a kid named A.J. he hates school, social studies. He has two best friends named Ryan and Michael. I liked when A.J. forgot show and share that starts with the letter D. He found a dime in his pocket. I recommend this book to anyone who likes to be a kid and jokes around.

Created: Nov 20, 2015, 11:07am   From: 199.180.148.169

Figure 2. Student Blog Post 1

Pete the Cat and the Bad Banana

By Logan on Nov 20, 2015

I read a book called pete the cat and the bad banana by james dean. Pete all was eat bananas he eats them all the time he eats them on peanut butter sandwich even in his cereal then he eats a bad banana. my favorite part is when he eats a bad banana and gets sick to people who likes silly and if they like james dean books.


Figure 3. Student Blog Post 2

This student work showed insight into what they were capable of in the future when it came to writing blogs. The guidelines were shown and modeled expressively,
and students followed them very well. Besides the guidelines, students knew that they were writing the post to help someone else find a book that they may like, which introduced them to the purpose of blogs, and was an introduction to a new social literacy for them. The blog posts took between two and three periods of around twenty minutes each to complete, which was rather time consuming. Students were finishing reading their books, prewriting their posts, typing and posting them. This is one reason that there were only two or three posts done per student, since we were limited on time during the Language Arts block and for the study as a whole. The first blog took much more time than the second, so I would anticipate they would get less and less time consuming each time.

When the blog posts were complete, the students commented on one another’s posts. In hindsight, I should have replicated the modeling done for the actual post to give guidelines for commenting. The comments that they posted on their blogs were not the best in terms of content, but they introduced them to the action of commenting, which can be later retaught for content. Below is an example of these student comments and an exchange from one boy to another. I chose this comment because one of the posters, Ryan B., is a student who rarely talks in class. He is classified Emotionally Disturbed (ED) and struggled to make connections with other students. Through the introduction of this new literacy he connected to another student that he may never had done before. Like the study from Stover, Yearta and Harris (2016) suggested, the students who are quiet may get an extra benefit from connecting virtually as opposed to forced group discussion where they may not want to speak as freely.
Figure 4. Student Blog Comments

These are just a sample of the quotes from students and their response to reading and writing on one another’s blogs. Students chose their own books for their blog posts, and they varied in levels due to the inclusion format of the classroom. Examples of books were: Pete the Cat, Water Everywhere, T’Was the Night Before Thanksgiving, and many more.

When this study began, several teachers in my grade were shocked at the idea of second graders writing a blog. This was something even the older grades did not do, and primary grade teachers expressed that I was ‘brave’ to try and tackle something like this. I had reservations during the first few days of the study whether or not this was going to
be a feasible task. It turned out to not only be feasible, but something that was executed with ease.

From the outcome of this study, I saw that my students were capable of creating social learning work at their level. Their blog posts were not perfect, but this was just the beginning of what could be a long line of blog posts and comments, improving with every cycle. Preparedness of students increased and they became digital citizens through the use of this social learning environment.

**Student Engagement Increase**

When researching for this study, I found the perspective of engagement and its effect on student performance very interesting. I had always thought that as an educator, I considered engagement when planning lessons. By this, I mean that I would look for a ‘hook’ or engaging way to get them interested in the lesson, just in the beginning. The more and more that I read about engagement in the classroom, I knew that the small group literacy time in my classroom must improve. My co-teacher and I would plan for our small group instruction and then scramble to find activities for those who were not being met with. Through this study, I allotted better time for students to not only interact with technology but also for them to have increased engagement as readers and participators in the classroom.

After the login and initial start of this study, the students began to use the technology on their own during their independent reading time. During this time the students would listen to fluent readers, write blog posts, compete in various reading games, and much more. The engagement, as noted in my teacher observations journal, increased from the very first day. “Students were excited and wanting to get to their
literature centers, with no reminders like they had needed in the past” (Teacher Journal, November 13, 2015). During the seatwork time that I had wanted to address in this study, I saw students fully engaged in reading and writing tasks during their individual work time. Examples of this were students listening to fluent readers on websites, commenting and writing their blogs, and completing activities such as word work or vocabulary that was making them better readers. Students were working without direction and were working hard putting out work that at the beginning of this study was unthinkable. This was something that I had never seen before. Not only were the students participating with excitement but they were participating with automaticity, and not needing any help to log on. Once I saw this, I knew the opportunities for individual work and technology/curricular integration was limitless. I was called ‘brave’ for attempting this, but the outcome and observable engagement proved that the students were very capable.

**Unexpected Gains**

This study meant to measure new literacies, technology, and student engagement. This was the focus of my findings when looking at the data and the feedback from students and my own observations. The results that I found from these particular points, I was happy with. However, as I took notes for the duration of the study I also found other positive areas that I was not measuring. One of the first that I found was fluency in reading programs that were reading aloud to my students. Obviously, I am aware that listening to a model of fluent reading helps students who struggle in any area of fluency. During a conversation with a student, he expressed that he liked listening to the readers on Storylineonline.com read to him because it made him think of how he should read
"with all of the different voices changing" (Teacher Journal, November 5th, 2015). This was the first of my interactions with these unexpected gains that were coming from this study. Up until this point in the study, I was looking at just the engagement or just the new literacies and student interaction and had never thought of all of the different benefits that could come along with it. Other benefits that I saw along the way included increased student vocabulary, typing skills, and several others. This led me to think about the implications for future studies as well as for my own work in the classroom as a teacher.

**Student Exit Survey**

As my study continued, I began to see that my initial questions for my exit survey were not going to be relevant. As I expressed earlier in this chapter, this study was not as much about new literacies as I had anticipated it to be in the beginning, and it organically changed as the study progressed. Due to these changes, I changed my exit survey to have it cover what took place in the study, rather than cover what I predicted this study would involve. Overall, the results from the student exit survey provided positive results and a positive interaction with the study and my students. For the final student survey, I created a polleverywhere.com poll, which was new to my students and just seeing them interact with this new platform was enlightening. When asked if they thought they became better at logging on to the computer, the resounding answer was yes. "Yes each day we do this I learn more how to log in" (Exit Poll, November 19, 2015) was an answer that encompassed the sentiments of other students, with others also expressing the help that they got from the teachers making it easier, as well as doing it more often was making it easier. Another new question that I asked them was about commenting on
blogs, and how they felt about creating them and commenting on one another's content. Some of the most telling answers recorded in my teacher journal (Exit Poll, November 19, 2015) were: "yes my favorite part is getting on;" “yes I like commenting on other people's blogs and making them feel happy;" and "Yes because you get to comment on people's books."

From these I gleaned that the students thought that the process was fun and engaging, but that they also liked to read about others and their books. These results were echoing what I saw in class, and the general class feeling towards writing blogs. From this alone I would call this study a success. Student’s level of engagement and their overall excitement are higher than I have ever seen. I hope to continue to see these results with the more I can integrate technology into our daily lessons.

Below are examples of student responses from the exit survey. This was a digital way that again showed students improvements with technology, but also provided rich insight into what they liked and learned from the study. Overall, from the exit survey I saw that students did like what they were doing, and would like to continue using the computers and technology in the Language Arts block.
Summary of Data Analysis

One of the quotes from chapter two that stuck out to me the most was "High levels of engagement distinguish higher performing classrooms from lower performing
classes" (Parsons, Malloy, Parsons & Burrowbridge, 2015, p. 224). During this study, I kept thinking of this quote. I was trying to transform this classroom from an old way of thinking which was keeping my students unengaged at times of the day, to a new aged classroom with students who were fully engaged and immersed in their work. Initially, this seemed like a daunting task, and looking back, it was a massive undertaking in and out of the classroom. Students, in the beginning days of the study, were often confused and overwhelmed by the new technology and all of its idiosyncrasies. Those first days were scary for both them and me, thinking ‘can a second-grade classroom accomplish this’? As time went on my students and I became more excited about the idea of using these new technologies and literacies in our classroom, and more capable of executing lessons that involved them. They began to realize just what they were capable of and worked together, helping each to solve problems and rise to the occasion. Overall, the data from this study suggests that students at this young age are not only willing, but also capable of working on technology daily. Additionally, the use of this technology can greatly enhance the reading block for all students.

Chapter five of this study showcases conclusions of this study, implications for further research and an overall summary of all sections presented thus far.
Chapter 5

Summary, Conclusions, Limitations and Implications for the Field

Summary

At the conclusion of my research, I found that students benefited greatly from the integration of technology and new literacies into daily lessons, and their engagement during this study increased in comparison to prior lessons. After the four-week study, which had students on computers, working in groups, and creating artifacts that would not be possible without technology, I found that this study benefited my students by making them more comfortable with all aspects of new literacies, such as multiple means of collaboration, and technology. During all of this, they were excited and engaged to a point I had never seen them before. This study introduced my students to a new way of learning, and it impacted many areas of literacy instruction.

At the close of the study, I discovered that students had become increasingly proficient, as well as engaged while working in groups, as well as with technology. In the weeks before the study, where I took baseline data, students struggled to log on to different computer accounts, and when we asked them to ‘turn and talk’ with their partners, we were often met with silence. Even just asking whole class questions, or watching students while they worked in centers, students were not excited about their learning. At the end of the study, these same students talked to one another and worked as a team, knowing what collaboration was and how to execute it.

The most measurable increase during the time of this study was the automaticity that came with using technology. Before this study, the students were using two in class desktops for all of their computer needs. They would log on and complete math games,
and often still look for help during this small task. By the end of the study, students were logging in, troubleshooting, and completely familiar with new platforms that they had never seen before. They improved their ability to interact with the technology, and it became second nature. They knew how to care for the technology, how to interact with it, and how to help others while using it. This was an area of noticeable growth, and something I hope continues even after this study.

In addition to the significant growth in technology interaction, students also applied the new literacies to their technology. As Lankshear and Knobel (2012) have stated, the "ethos stuff" for new literacies can occur outside of technology, and I saw this new ethos occur both within, and outside of the context of technology. Students created their blogs and had to comment meaningful comments to one another through the interface of kid blogs. This was something they did well with my coaching, and modeling. Students also worked on their second blog post as a team. This is where I saw the collaboration outside of the technology, and the students working very well together.

Finally, I saw students fully engaged in a lesson, and excited to work in literacy centers. In my baseline data, I saw that students did not get excited about centers, and they focused on skills such as handwriting, or math skills that were not helping them as readers. After this study had started, students were excited to get to centers, and they expressed different things that they were learning that I did not even expect them to take away from this study.

The most surprising aspect of this study was the learning that I had not intended. In centers, students were working on different websites and with different apps, and at our post conferences they would say that they saw how someone should read a book with
their voice being ‘smooth' and different for different characters. They also stated that they read a book that they saw someone review that they had not read, would like to explore as their next independent book. Students were getting positives interactions and results out of these websites and collaborations that I had never intended, which made the research more worthwhile. These outcomes inspired me to continue these centers and add to them for the remainder of the year.

**Conclusions**

In reflecting on the literature surrounding technology and new literacies, I again focused and found that my study was influential to my students because it helped them now, in their current classroom, but also in their future. This is important because of the technological and collaborative world that we live in, students will need to use these skills on a day to day basis in their future education and careers. In my literature review, a quote from Kist (2013) struck me. He questioned how we could prepare people for today’s hyper connected world, without practice with technology in school. Further along in this text, Kist further explained how this is a quality of life issue for children, outside of the fact that it is an employment or educational issue. Communicating via the internet has become commonplace not just for education or employment but also for social media. He states, "Sharing recipes or sports scores with a Canadian or British friend on Pinterest has become as easy as opening the door and leaning on the backyard fence to chat with a next-door neighbor" (Kist, 2013, p. 39). I feel as though this study was the tip of the iceberg when it comes to all of these global issues, but it got my students started and familiar and on their way to becoming more comfortable with technology and collaboration that they will without a doubt use in their future.
In addition to the results of technology and its benefits in my study, I also saw vast improvement when it came to student engagement. When researching literature for this study, this quote stuck out to me "international data as well as US data has shown that reading engagement could compensate for that overcome low socioeconomic status and family educational background" (Parsons, Malloy, Parsons, Burrowbridge, 2015, p. 224. When conducting my study, I looked pointedly at times to the students in my classroom who may have fallen into some of those subcategories of low socioeconomic status, or troubled family background, or even my students who had various special needs. Watching them collaborate and interact and be excited and engaged did more than any well-crafted paper and pencil lesson could do. Taking a student who was excited, and giving them any task made them more likely to tackle it. I have seen some of my students with behavior problems off task and unengaged during reading. My students who had reading difficulties would use their distraction as a defense mechanism. Seeing them collaborating, interacting with technology and fully engaged proved that engagement is crucial, and this was a way to have it in my classroom every single day.

Fundamentally, the conclusions that I drew from research aligned with the literature that I gathered surrounding engagement, technology, and new literacies. My students became more comfortable with technology and collaborate, which will assist them in their future endeavors, and this increased their engagement that made them more willing and worthwhile learners. Students enjoyed the time so far that they have spent with these centers and activities, and they have made some paramount discoveries and learned valuable lessons while doing so.
Limitations

There were two significant limitations that I found to be present throughout this study. One was the time available for the study to take place, and the other was the availability of technology, an essential component of this study. Both were not detrimental to the study, but with more time and more access to technology and more time to conduct the study, the study would have fulfilled what I thought would be a higher potential.

This study, a four-week time span, only began to scratch the surface of where I could go with technology and new literacies. Getting students acclimated to the computers and the different platforms was a challenge. Luckily, I spent extra time going over this, but if all of this had to fit into a rigid schedule where there was no extra time to work, there would be much less from this four-week trial. More that we could have done was cut short due to the time limits of data reporting, even though the practice of working with technology continued after the date of the study had ended.

Furthermore, a lack of availability of technology was a problem when it came to this study. My students had access to netbooks, which were unreliable when the study started, thankfully I signed out a laptop cart that was not in use for the older grades. Had I not had the opportunity to sign these out it would be hard to integrate the technology. Some days I could use four or five laptops, some days I could have the whole cart. It varied and made me wonder about the importance that is put on access to technology in my district if the most support occurs for the older ‘testing' grades having access.
Implications for the Field

After looking further into the data that I collected over this four-week study, several areas regarding technology in the classroom could be further investigated. Teachers who would plan to investigate would be wise to look at the limitations of this study and plan for more time, perhaps 8-12 weeks, and be sure that there was consistent access to the technology needed to get a full scope of the study. With these limitations no longer as such, I feel the study would show much greater benefits in all area and a much more in-depth research report.

Researchers could complete this study another, older, age group working on a similar study. This was a second-grade classroom, and I was amazed at what they could accomplish given their age, knowledge, and background with digital devices and collaboration. I believe that older students could delve even deeper into the benefits of new literacies and use technology in an even more advanced way. The small login problems and initial troubleshooting issues would be less of a problem with the older grades, and the benefit to their education could be lasting.

In conclusion, the use of technology and new literacies can help student engagement, and assist them in gaining skills that will help them become digital citizens and productive contributors to society in their future. It should be an integral role of lesson planning for teachers to make sure the curriculum is dependent in some sense on collaboration and technology, since as this study shows, improves student engagement and therefore student progress in reading. By giving students the methods and opportunity to work with technology and collaborations, a classroom can provide the stepping-stone for students using technology and collaborating in the 21st century.
References


