IPAD INITIATIVES IN THE ELEMENTARY CLASSROOM ENHANCING LITERACY INSTRUCTION

by
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CHAPTER ONE

Introduction

Chapter Overview

Through my own experiences growing up with some technology and my experiences teaching in a world where new technology is being introduced all the time, my research question is, *how can the use of iPads in the elementary classroom enhance literacy instruction?*

Technology has really grown up alongside me. When I was young technology basically meant going to the computer lab. There weren't any tablets or smartboards to use. What we used computers for was very minimal as well. In elementary school, I didn't have a cell phone to distract me all day long and I couldn't find answers just by asking Siri or typing it into my phone. Technology has changed massively in just the last 10-15 years. I can only imagine what technology will look like when I have been teaching for that long.

Teaching in a world full of technology and kids who know more about technology than adults do is crazy. In the past five years, I feel schools have brought in so much technology into classrooms and are asking teachers to use it. The results of a national survey by Pearson and conducted by the Harris Poll shows that 78% of elementary school students use a tablet on a regular basis (Cavanagh, 2015). Cavanagh (2015) also mentions that numbers keep rising every year on usage of technology like tablets being
used in the classroom. Technology is great in many ways, but if we don't have the knowledge on how and what to use it for, it can easily be left in the dust. I am aware of many teachers who are using technology daily in their classroom. It seems as if we need strategies and ways to incorporate the technology we have to make it useful in our classrooms.

Within this chapter, you will learn about my own experiences learning with technology and my experiences teaching with technology. You will also learn about my experiences with how technology has been a positive influence in my classroom and how it has been a negative one.

My experience learning with technology

As a young child I only remember a couple different pieces of technology used in school. There were computers in the computer lab and typing devices used during when we learned keyboarding. I never had a computer in my classroom. We would have set times we could go to the computer lab. I remember as an older elementary schooler, a lot of time spent there was to type different kinds of reports. Other things I remember doing in the computer lab were different spelling and typing games. All of our learning in the classroom was done without much technology at all.

By the time I was in middle school, cell phones were becoming a big thing. I got my first cell phone on my thirteenth birthday and boy was I excited. Now, as we can all remember, our first cell phones basically included being able to make phone calls, text using T9 and the game snake. High school wasn't much different except cell phones were
starting to become a little more high tech. When it came to learning with technology though, we were still researching and writing papers in the computer lab.

In college I got my first laptop and got to experience things such as online classes and getting textbooks digitally. As an adult, I think we use technology more than we know, from using our cell phones, to writing emails on our iPad, or researching and typing papers on laptops. There are so many devices at our fingertips now that sometimes I think it can be overwhelming. I don’t know that we necessarily learn with all our devices like we might in the classroom today, but we certainly use them regularly in our daily life.

My experience teaching with technology

My first year teaching was the year 2015-2016. I had the privilege of having 1-1 iPads in my first grade classroom. I took over a classroom part way through the year with students who were used to using their devices for almost everything. They used them to read, to practice phonics skills, to take pictures of their work, and for math practice. We had a Twitter account to show everything happening in first grade and each student had their own student portfolio to keep everything they have submitted online. It was a lot. I knew there were ways to incorporate iPads into my classroom but didn't expect to have to try them all at once. I made it through that year and came away with some positives and negatives about using technology in the classroom. The kids loved having their own device and with most activities they were very engaged. I have learned however, though technology can be used all day everyday, it doesn't need to be used all day everyday. I am
so interested in best practices for incorporating iPads into my classroom but I am also a believer in having balance. Balance to me means learning through technology, but also learning without technology.

The next year I was hired as a full time first grade teacher at a new school that had six iPads per classroom. Coming from a school with 1-1 iPads and high usage of those iPads, this was an abrupt change. I struggled at first trying to figure out how to best use 6 iPads with a whole class. They became mostly part of a small group center for reading or math practice that year. I knew I could probably be doing more but just didn't quite get to where I wanted to that year.

Entering my third year of teaching, I made it my goal to figure out a few more ways to use the iPads in a purposeful way. One of my first grade colleagues was trying to do the same so we teamed up. Lucky for us, later in the fall, we had the chance to get our hands on enough iPads for our classrooms to make us 2-1. We both thought this was huge because half a class set is so much better than just 6. We started looking at ways to use our new amount of iPads and eventually agreed on an app called SeeSaw. This is a student driven digital portfolio and a way to communicate with parents. We could upload activities for kids to do, put sight word lists on there to practice and/or simply capture a part of our day. This app was great because everything we wanted to do was all in one place. We also figured out times in our day where we would share iPads making it a class set.
Now this is my fifth year teaching (fourth at the same school) and I am teaching kindergarten for the second year. We are still using SeeSaw because it is a great way to keep a portfolio of students work throughout the year but I feel like I could be doing more. There are some weeks we use SeeSaw a lot and some where we don't use it at all. We also use our iPads during centers for math and reading practice. I have searched for apps that would be beneficial to my students. Some have been great and others didn't work for our classroom. I want to know what initiatives are out there for incorporating iPads into the classroom in order to enhance student learning. This has lead me to ask, *how can the use of iPads in the elementary classroom enhance literacy instruction?*

Every year I am amazed at how much students know how to use technology. They know how to use an iPad more than they know how to use a computer or use a mouse. Now that I am teaching kindergarten, it is very apparent that students are use to ipads over computers. The first few times we go into the computer lab, I see most students don't know how to use the mouse and instead try to use the computers like a touch screen. With the amount of devices being added to classrooms and the amount of technology use, technology is becoming more of a necessity rather than a luxury (Hicks, 2011). Our future is bright and so is all the technology that is going to be introduced. I think it’s valuable for students to know how to use all these devices because they will need knowledge on them as they get older.

**Goal/ Research Question**
Technology is adapting and growing at a fast pace. Because of all the exposure students have already had with technology, it would be best for students and teachers to incorporate technology as much as possible (Hicks, 2011). In this capstone, I will be researching different ways technology in the classroom can benefit students learning specifically to enhance literacy skills. Also, digging deeper into the pros and cons of technology and learning. I will further discuss best practices using technology.

Classrooms around the country are incorporating more technology everyday. Classrooms with access to technology should be using their devices with students best interest in mind. I would like to know what initiatives there are involving iPads as well as whether or not increasing technology use has a positive or negative effect on student learning.

More specifically I would like to find ways to use technology to support learning in reading. Reading is such a big part of our curriculum and the most time is taken for reading. I’m hoping to find out how high interest in technology can heighten reading instruction. I also hope to find strategies on how to use iPads for reading instruction and to find out whether reading and instruction is enhanced when using technology. Student engagement is crucial and students seem to be highly engaged when using technology. I predict that research will say technology increases student engagement and active learning. Lastly, from my research I would like to expand my knowledge on different apps, activities and lessons to use with iPads in reading.

Summary
I have grown up watching technology evolve and change drastically in the last 10-15 years. As a child, I was not surrounded by technology like children are today. As an adult, I get the privilege of being an educator to young children. Hicks (2011) says “Today’s students are unlike any the educational system has ever experienced. Members of this generation are most often referred to as ‘digital natives’ or the ‘Net generation’ because they have been immersed in technology since birth” (p. 188). I see students as young as third grade pulling out their cell phones as they walk out of school at the end of the day and believe it or not, I also hear my kindergarteners talking about having phones. Technology is everywhere. Tablets have been rolling into classrooms more frequently and have become something teachers are interested in having in their classrooms. Through my research, I want to know how can the use of iPads in the elementary classroom enhance literacy instruction?

Chapter Two is the review of research literature that will discuss strategies to implement 1-1 iPads in the classroom, the effects of technology on student achievement and student engagement, integration of technology with reading achievement, and the positive and negative effects of technology in the classroom. Through this research I will gather information as to what the best methods are for using technology, specifically, iPads in the classroom. I will also learn how I can integrate iPads and reading instruction together. In the end, my goal is to find purposeful ways to keep up with 21st century students by using technology in my classroom.
CHAPTER TWO

Literature Review

Introduction

The following chapter is a culmination of research and sources that discuss literacy and technology. The topics covered will help guide my website into a meaningful resource that relates to my research question: how can the use of iPads in the elementary classroom enhance literacy instruction?

The first section will discuss implementation of technology in the classroom, what steps should be taken in order to implement technology successfully, implementing technology to differentiate for students and benefits to using technology in the classroom. This research is beneficial for my research topic as it discusses different ways to implement technology. The following section will discuss the motivation for using technology in the classroom. The research will go over different motivation for students, parents and teachers. This is meaningful to my research topic so I can ensure the website emulates positive technological approaches for students, parents and teachers. The next section of research will go discuss literacy development and new literacies. Literacy has come a long way and blending technology with literacy is becoming a comfortable pair. New literacies will discuss the way technology is taking on a new role in the literacy world and how combining both print and digital text can be most beneficial. Researching the development of literacy as well as new literacies will help shape my website into something meaningful for teachers to use. The last portion of the literature review will discuss the many ways e-books have been brought into classrooms, features of e-books
and a discussion on print vs digital text. This section applies to my topic because it will help narrow down the best ways to use e-books and what to include on the website.

**Implementation**

“Successful implementation of tablet technologies in schools requires careful, long-term planning before, during and after the event” (Clark & Luckin, 2013, p.3). Doing research and making a plan is a crucial step to implementing iPads or any device into the classroom. Just having devices in the classroom doesn't do any good if they aren’t being used. Making plans, having ideas for apps and prepping activities will help transition students easily. This section will discuss different ways to implement iPads, what benefits there are to bringing technology into the classroom and how implementing technology can differentiate for students. There are many ways to use technology in the classroom. Learning how and why you want to use it will help organize the process. Many benefits like easy communication, cross curricular use, high engagement, differentiation and easy access to tools such as e-books and web materials. Implementing 1-1 iPads can give students the opportunity to have a device to themselves in school. This gives the opportunity for students to have apps or certain levels of apps ready and differentiated just for them.

Technology is most beneficial in a classroom when integrated into curriculum content (Smith & Throne, 2007). Research shows there are many ways technology can help improve student performance including collaborative learning, differentiating for every student and sharing responsibility for learning, implemented into regular instruction, opportunities for students to create products, and when everyone in the school
community is on board with the use of technology and being willing to continue to learn about it (Smith & Throne, 2007). Another study done by Frank Boster reported three findings as to why technology is effective in the classroom: technology and multimedia use engages students and leads students to be more interested and high achieving, technology and multimedia use leads to teachers who are more prepared, and technology and multimedia use can change how students interact and help students learn (p. 11). Smith and Throne (2007) found other survey results supporting technology in the classroom because of factors like students using innovative technology to help support their learning, better communication, students believing technology enriches learning, and the major benefit of technology helping differentiate for students.

Researchers found that the use of multimedia activities in the classroom helped teachers get further in class instruction because of the success of technology (Blachowicz, Bates, Berne, Bridgman, Chaney, & Perney [as cited in Puckett, 2013]). Many teachers have found success with technology; however, teachers deserve training on how to successfully use and implement it just as students get trained when they are introduced. Jenkinson (as cited in Puckett, 2013) discussed how crucial proper training can be stating:

...teachers often try to implement technology into the classroom without fully grasping the how it works or in which context it should be used. This, unfortunately, does not effectively integrate multimedia learning into the academic environment. In fact, it renders it useless (p. 9).
Courts and Tucker (2012) report how imperative it is to incorporate technology and as technology continues to advance, teachers will have ample opportunities for implementation. Thoughtfully planning and getting trained on technology can prove to have a huge impact on how implementation actually goes. Not being prepared to use technology to its fullest can end up in a less than satisfying experience for students. Clark and Luckin (2013) listed phases in which teachers can get familiar with devices. Some of them included general familiarization with features, locating and understanding apps, identifying appropriate apps that match curriculum, finding apps that can help differentiate, identifying ways to use iPads beyond basic teaching and sharing teacher resources for students and peers.

Everything done in the classroom should be to benefit students. There are many benefits of implementing technology into the classroom. Lavin, Korte, and Davies (as cited in Puckett, 2013) assert that technology helps keep students interest levels up as having an increased amount of student participation. Another success is improvement in student behavior and as behaviors go down less interruptions are had during learning. Engagement in learning is a big part of why iPads could be a good thing for classrooms and students. Because students are growing up with so much technology, they find it very engaging when used in the classroom.

Among many other reasons why technology in the classroom is beneficial, differentiation is a huge reason why teachers love it. Smith and Throne (2007) believed, “Technology improves performance when the application adjusts for students ability and
prior experience, and provides feedback to the student and teacher about student performance or progress with the application” (p. 8). Smith & Throne (2007) also stated:

Differentiated instruction focuses on teaching strategies that give diverse students multiple options for taking in and processing information, making sense of ideas, and expressing learning. Technology tools can support good instruction and offer personalized learning environments in which students interact with software, conduct research, create products, and communicate with others outside their school. Both differentiated instruction and technology tools are important for 21st-century education, aka digital age learning (p. 8).

Differentiation implementation roles out in many steps, the first being the classroom environment. Creating an environment where students feel comfortable to learn and make mistakes can facilitate a sense of community. Then showing students specific independent learning skills with technology can facilitate independent learning and goal setting. Third, thinking about how the teacher will use technology in the classroom on a regular basis will help students see consistency and get the most out of technology use (Stanford, Crowe, & Flice, 2010).

Stanford, Crowe, and Flice (2010) say “Remember curriculum comes first. As with all good teaching, knowing the students and curriculum is central to successful teaching” (p.5). There are a lot of different things to think of when bringing technology into the classroom. Heinrich’s (as cited in Clark & Luckin, 2013) strategy for implementation includes a nine- step model including “developing a clear purpose, defining the learning culture and support model, report findings and evaluate current
position, find out how many students and staff already own an iOS device, involve everyone, get devices into the hands of teachers and learners and report findings” (p. 16).

Planning ways to use the technology given to you is an important step. Stanford et al. (2010) stated, “Technology for technology’s sake is not effective teaching” (p. 5). This capstone is heavily focused on how technology can help enhance literacy. However, the chart below shows just the beginning of what you can do with technology in both math and literacy.

(Stanford, Crowe, & Flice, 2010)

Powerpoints, Web tools, blogs, podcasts and Wikis are all common ways to differentiate using technology (Stanford et al., 2010). Choosing what best fits with students and the curriculum will help narrow down what strategies to explore first.

Table 1
Differentiating with Technology

<table>
<thead>
<tr>
<th>Content</th>
<th>Process</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Quests</td>
<td>Software</td>
<td>Rubrics <a href="http://rubistar.4teachers.org">http://rubistar.4teachers.org</a></td>
</tr>
<tr>
<td>Internet Scavenger Hunt</td>
<td>PowerPoint for presentations, book reports, language experience, etc</td>
<td>Create, customize, and share learning activities <a href="http://www.quia.com">www.quia.com</a></td>
</tr>
<tr>
<td>Excel</td>
<td>Web 2.0 Tools: Blogs, Podcasts, Wikis and more</td>
<td>Digital Portfolios for writing</td>
</tr>
<tr>
<td><a href="http://www.funbrain.com">www.funbrain.com</a></td>
<td><a href="http://www.graphic.org/goindex.html">www.graphic.org/goindex.html</a></td>
<td>Building Vocabulary have students use the thesaurus to replace overused words</td>
</tr>
<tr>
<td>e-pals</td>
<td>Practice Vocabulary words by typing (words art is fun and makes cool flashcards)</td>
<td>Digital pictures for artifacts</td>
</tr>
<tr>
<td><a href="http://www.epals.com">www.epals.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning strategies</td>
<td>Visual images of vocabulary <a href="http://www.scrapblog.com">http://www.scrapblog.com</a></td>
<td>Word Processors for spell checking</td>
</tr>
</tbody>
</table>

(Stanford, Crowe, & Flice, 2010)
Motivation

Motivation is needed if students are going to want to be interested in something. Without some kind of motivation, how will students want to get anything done? How do any of us accomplish anything without a little motivation? Technology is becoming a huge motivation for students. Students think of technology as fun and engaging therefore using it effectively in the classroom can be a major bonus. This section will review student motivation, parent motivation and teacher motivation for using technology in the classroom. One review says:

For learners iPads are easy to use and attractive. The research on iPad use and adoption overwhelmingly reports that tablet devices have a positive impact on students’ engagement with learning. Findings report increased motivation, enthusiasm, interest, engagement, independence and self-regulation, creativity and improved productivity (Clark & Luckin, 2013, p.4).

The same review from Clark and Luckin (2013) mention evidence from the parents is overall positive with many benefits identified. Research shows teachers have also found that iPads have enhanced learning by giving the children freedom of learning independently, have activities that can become everyday practice, ease of use and more (Clark & Luckin, 2013).

Students are easily motivated by technology because it’s a new way to learn things and also what they have grown up with. Many students know more about navigating apps and devices than teachers do. Bringing technology into the classroom can be an easy motivator for students to be engaged in their learning. All students are
different and therefore learn in different ways. Having the ability to give students a
device that can be all theirs for the year can provide easy and manageable differentiation
to every student (Clark & Luckin, 2013). According to Frick et al, the more students are
motivated to learn the more likely they are to be successful and then are more likely to
achieve the learning objectives (as cited in Frick & Kim, 2011, p.16).

As technology continues to increase and children are growing up in a more
technical world, students are already familiar with the use of tablets and other pieces of
technology. Students are actually more familiar with tablets than with actual desktop
computers. One factor of motivation for technology in the classroom is ease of use.
Studies from Gasparini, 2011; Allen, 2011; Heinrich (as cited in Clark & Luckin, 2013)
shows that most students find a device like an iPad is easy to use and explore. With
younger learners, there are suggestions of needing to teach students more about how to
use the device and its features, as well as how to create certain things and download apps
(p.24) . Another study from Nicol, Owens, Le Coze, Macontyre, and Eastwood (2017)
showed the reactions to a high technology active learning classroom and a low
technology active learning classroom. One comment from students was that “this
experimental structure of the course was very interesting and made coming to class a lot
of fun” (p.259). There is an overwhelming response that the positives far outweigh the
negatives of iPad adoption and student engagement. There are a lot of positive features
such as being able to do research, brainstorm with mapping apps, taking notes and
creating presentations. For younger students, practicing skills through apps and creating
simple projects were brought up as being beneficial (Clark & Luckin, 2013). According
to Clark and BBC (as cited in Clark & Luckin, 2013), an iPad should be seen as just one of many tools for learning and shouldn't be expected to do everything (p. 4).

Research shows a lot of added motivation and benefits to bringing iPads into the classroom but even with so many great things, looking at what concerns might be out there are helpful too. Henderson and Yeow (as cited in Clark & Luckin, 2013) found one difficulty discussed was using the iPad’s touchscreen interface. Although this difficulty was not found as problematic for most because this was just one tool to use in the classroom. Another concern was overuse or being too distracting for students as well as a lack of confidence for some. For students, this wasn't a huge concern because of all the other great features iPads offer. According to Courts and Tucker (as cited in Puckett, 2013), technology may not be the sole reason for student success but can help increase student engagement. Many learning styles can be reached by using technology. When student learning needs are met, students stay more engaged and in turn are more successful. Technology gives students the chance to have both (p.7).

Parents are another group of people that have opinions and are considered stakeholders on technology use in the classroom. Just like the learners perspective, parents believe there are many benefits to using technology. Along with those benefits are a few concerns that will be discussed as well. Planning to bring technology into a school takes a lot of time, research and planning (Clark & Luckin, 2013). Parents, although aren't the ones who will have to use the technology often still will be impacted because their students will be using it. Burden et al., (as cited in Clark & Luckin, 2013)
found that “Most parents felt confident in helping their children use the iPad to support learning in the home” (p.22).

According to Clark & Luckin (2013) parents see a lot of encouraging things when it comes to bringing iPads into the classroom. One advantage was having much better communication. Having iPads in the classroom has given teachers and students an easier way to communicate. If iPads are being brought home students could write a message to a teacher about an assignment. Teachers benefit because they can assign homework and/or grade homework submitted on a device. Parents also thought communication between parent and teacher had increased. Parents thought using FaceTime or another app for parent/teacher or student/teacher conferences helped increase communication. The ease of being able to get a hold of the teacher as well as the teacher being able to send messages or reminders to parents is another perk. One study from Clarke (2012) found that parents thought the idea of having everything in one place and not having to carry a bunch of books around was a huge benefit (as cited in Clark & Luckin, 2013, p.4). Increased engagement and being able to make learning differentiated were other positive factors brought up.

A couple concerns parents had with bringing technology like iPads into schools were the cost and the opportunity for theft or having lost items. Some schools have asked for parents to pick up the difference in funding for such devices that can’t be bought through student funds. This raises concerns for parents because of the cost that could potentially fall on them. Others have concerns as to whether costs to buy these devices outweigh the benefits they offer. Parents also express anxiety over theft, loss or breakage
of these devices and what expenses they may have to contribute if such a thing happens (Clark & Luckin, 2013). These are all things that have other factors like whether students are bringing iPads home or if students are using them only during school hours.

According to Burden et al., (2012):

> Overall, however, 83% of parents felt that the iPad pilot had been valuable and indicated, amongst other things, that it led to increased engagement and interest in learning, gains in knowledge and technology skills, more time spent on homework and offering more opportunity to make learning relevant and authentic (as cited in Clark & Luckin, 2013, p. 23).

Although a lot of thought, research, time and planning needs to take place in order to effectively bring new technology like iPads into a school. Ultimately teachers are the ones who will have to plan lessons on how to use it. Therefore, teachers' opinions are very important in considering such a big change in a school. In a study, Burden et al., (2012) found that “teachers felt that using iPads to support teaching and learning in the classroom enhanced the learning experience and transformed their teaching practice” (as cited in Clark & Luckin, 2013, p.21). Teachers have many opinions on iPads and why they think they should or shouldn't be used in the classroom.

One thought that parents and teachers both expressed as being beneficial was the communication piece. Along with the ease of using an iPad, being able to instantly have communication with students through e-mail or FaceTime was one benefit teachers brought up. Having the ability to access a multitude of activities, apps and resources was yet another motivator for teachers to bring devices into the classroom. Having these new
resources available at teachers fingertips made teachers rethink their professional role and proceeded to have a more collaborative classroom between teacher and students. This provided teachers the freedom and students the opportunity to learn independently as well as with their peer groups more frequently.

Differentiation as defined previously is something all teachers strive for and try to bring into classrooms as much as possible. Teachers know all students learn and behave differently so many teachers have seen technology as another way to differentiate for students. According to Stanford et al., (2010) differentiating with technology can easily be done as long as you use time as a resource. There are a lot of websites that can differentiate levels of skills for students, PowerPoint can be used in multiple ways, blogs and podcasts are also easily differentiated.

Heinrich (2012) states, “At the same time, they did identify lack of time to develop relevant resources, e.g. teacher- authored iBooks and lack of budget for paid-for apps as an issue whilst, at the same time, expressing a desire for more ‘subject-specific’ apps” (as cited in Clark & Luckin, 2013, p. 21). Even having the wide variety of activities and apps available, sometimes funds are still needed for apps that cost money. Doing the research can help find quality apps that can be used across curricular subjects. Clarke and Zagerall (2012) talk about other less than motivating perceptions of technology that includes teachers who aren’t very familiar with it. Often times when teachers aren't familiar with technology, they aren’t likely to want technology in the classroom (as cited in Puckett, 2013, p.9). This shows as discussed in the implementation section how
important teacher training and preparation can be for motivating teachers to integrate technology.

**Literacy Development and New Literacies**

**Literacy Development**

Literacy development is an essential part of primary students education. Finding successful ways to teach literacy can help build strong readers and writers in later school years. What does literacy development look like when technology is involved? Is there positive effects or negative effects of using technology to teach literacy? This section will discuss what literacy development looked like before technology, what it looks like while using technology, where literacy and technology are going and what is needed in order to be successful in this world of technology. Over the last ten or even fifteen years technology has taken the world by storm. Students are still expected to read and write but some new skills that have to do with technology are becoming important too. In order for students to be successful when they go out into the world, they are going to need to know how to navigate through basic technology. Emails, the internet and apps are just the beginning of what students will need to know as technology continues to develop.

Purves (1990) suggests that the world of text is one filled with information that needs to be processed and refined. In order to do this, personal experience is needed to translate that into knowledge (as cited in Sutherland-Smith, 2002, p. 662). Before technology was so advanced, literacy was all printed text. Web features and other navigational skills weren't needed in order to find information that was wanted. Being able to use a dictionary or thesaurus were skills included before web based text were
available. Many skills needed to navigate through web based text are similar to that of printed text. However, additional skills are needed in order to successfully and intentionally use it.

Literacy development now is advancing quicker and quicker all the time. WebQuests are something being brought into the technology world that is fairly new. This goes along with the theory that both traditional text and digital text are needed for students success in the future. A typical WebQuest activity has students researching information on the internet individually, then coming together in a small group to share and discuss research or results found (Leung & Unal, 2013). This shows how both sides of learning can complement each other so nicely. Advantages found when combining technology and literacy through WebQuests included how fun and appealing it was, how it catered to different learning styles and it encourages critical thinking skills (Leung & Unal, 2013). As the combination of literacy and technology continue to develop more studies and research is being put into how to blend both. One pilot used digital storytelling to teach new literacies in multiple ways while also teaching oral storytelling (Stacy & Aguilar, 2018). The pilot used google slides to create the digital stories and found while making them students also learned other skills along the way. Some skills learned were making an account, accessing email, organizing photos and slides and exploring other apps google has to offer (Stacy & Aguilar, 2018).

The future for literacy and technology is unimaginable. Technology continues to change rapidly making educators and education play catch up often (Sutherland-Smith, 2002). Everything having to do with literacy is getting the opportunity to be used through
technology. Even speaking and listening skills can be incorporated using technology. Using an app to take pictures and then voice over talking about the pictures, photo narratives of images and recordings, and digit storytelling are just a few ways that speaking and listening can be practiced through technology (Fisher & Frey, 2014). Fisher and Frey (2014) state:

A day should not go by in which students silently try to learn content. Instead, there should be a hum of learning, with many voices engaged in discussions about the topics under investigation. Only then will we fully realize the literacy achievements of our students orally, digitally, and in print (p. 69).

Overall, teachers must be willing to learn from technological changes and realize sometimes students are great resources in knowing even more than teachers do about technology (Sutherland-Smith, 2002).

**New Literacies**

The definition of what a text is is changing between generations. As our world becomes more and more digital, the terms involving literacy are changing too. The following section will explore what reading and writing means in this world with so much advancing technology. Leu (2000) found that “much like a moving target, literacy is constantly changing in response to technological advancements” (p. 289). Every year technology is starting to play a bigger part in classrooms. What does new literacy look like and how will it be used? Karchmer-Klein and Shinas (2012) argue “that in an ideal world, the gorilla and donkey would read a book together, move to the laptop to post a collaboratively written review on a literary blog, then search the Internet for a new
e-book to share” (p.292). Quality teaching doesn't have to be one way or the other, it can be the best from both.

New literacies is an ever changing term and one that involves a wide span of opportunities. According to Damico and Riddle (2006):

Being literate in contemporary society means being active, critical, and creative users not only of print and spoken language but also of the visual language of film and television, commercial and political advertising, photography, and more.

Teaching students how to interpret and create visual texts such as illustrations, charts, graphs, electronic displays, photographs, film, and video is another essential component of the English language arts curriculum. Visual communication is part of the fabric of contemporary life (p.35).

Communicating through technology, inferring different texts, evaluating resources and using a range of technical features as well as being engaged with others 24/7 through blogs, social networking, messenger and online games is just the start of what new literacy looks like today (Karchmer-Klein & Shinas, 2012).

Forzani & Leu (2012) states, “All students must start learning new literacies skills early if they are to gain the skills they will need as adults” (p. 421). New literacies is important for many reasons because of how much it surrounds the world. Children learning new literacy instruction is necessary for students to be functional adults in their future (Forzani & Leu, 2012). According to Hutchinson, Beschorner, and Schmidt-Crawford (2012) digital technology should enhance the curriculum and provide new and transformative support for learning for students.
Sometimes teachers are reluctant to bring technology into primary classrooms because they may not be “ready” to use it. However, with all the features technology has to offer, introducing new literacies early in children’s education can prove to be beneficial (Forzani & Leu, 2012). By introducing technology to young learners, it gives them an opportunity to build on existing knowledge. Technology can help naturally guide students from what they already know to potentially new knowledge they can learn (Forzani & Leu, 2012). Technology can also help assist students who may be struggling readers because of all the added features presented. More guided practice and exposure can give students and extra boost they wouldn't necessarily get through printed text. Forzani & Leu (2012) said “learning how to use the Internet strategically may be essential for adults in an online age, but it is crucial for young children. New literacies instruction not only is necessary and appropriate for young children; it will define their future” (p. 423).

Karchmer-Klein and Shinas (2012) found it difficult to pinpoint a clear set of reasons and skills that are important in new literacies but instead recommended four principles for teachers to keep in mind when using and teaching technology in the classroom. The first principle was “keep your eye on the moving target” (p. 289). This section discussed with our ever-changing technological advances, teachers should consider as technology gets more advanced so will literacies (Karchmer & Shinas, 2012). Principle two was “recognize the complexity of new literacies” (p. 290). This was about how internet activities and other technical apps often require a different set of skills than traditional text. Navigating through an online text is very different than reading through a
Learning the different features of e-reading will have to be something considered when teaching with technology (Karchmer-Klein & Shinas, 2012). The third principle was “digital natives still have a lot to learn” (p. 291). Even though many or most students nowadays have completely grown up surrounded by technology does not mean they have used it or are experienced with it. When teaching with technology, teachers should not make assumptions when it comes to the use and knowledge of what students already know (Karchmer-Klein & Shinas, 2012). The last principle was “reconsidering assessment methods” (p. 291). First, just as we assess students fluency or phonics skills, assessing levels of technology skills from basic to more advanced should be considered. Second, when using technology to teach lessons, assessments should reflect how students used the technology to present their responses. Expecting a response that can be done without technology isn't using technology to its fullest potential (Karchmer-Klein & Shinas, 2012). Keeping in mind the donkey and gorilla scenario, technology is not an end all be all but an added bonus to curriculum instruction.

Incorporating new literacies into the classroom can be one that isn't easy to do. A lot of teachers can be used to how things have always been done with little interest in changing. However, new literacies is necessary to keep up with the fast evolving world of technology. Teachers who choose not to incorporate new literacies into their classrooms will soon be doing a disservice to students. According to Gervetti, Damico, and Pearson (2010):

Teacher education programs should help teachers develop a broader understanding of literacy that moves beyond a singular, psychological, fixed,
skill-focused view to a view of literacy as inherently situated in personal, historical, cultural, and social contexts, and learn to nurture in their students a similarly situated stance toward literacy (p.380).

Teachers need to understand different ways in which to incorporate technology into the classroom. Different ways of getting started with using technology could be for assignments, lessons or assessments but these don't have to all be done at once (Gervetti et al., 2010). There are so many ways to start incorporating technology in the classroom. Leu, Leu, and Coiro (2004) laid out a framework for defining new literacies they think students need to be successful. These included identifying important questions, navigating complex information, critically evaluating the information, synthesizing information to address questions and communicating answers to others (as cited in Gervetti et al., 2010, p.382-383). This is an interesting framework to think about when thinking of new literacies and where technology will go.

E-books

Schugar, Smith & Schugar (2013) said, “Simply stated, e-books have the potential to change the way our students read and consume text because of their interactivity and convenience” (p. 615). E-books are becoming more and more popular whether reading for pleasure or bringing them into the classroom. There seem to be a lot of multimodal features that can enhance the reading experience. The big question with e-books is are they beneficial to the students or a distraction because of all the features they possess? The following section will discuss the positives, questions and concerns as well as print vs e-books.
Schugar, Smith, and Scholar (2013) gave four considerations when thinking about bringing e-books into the classroom. These considerations included letting students become familiar with the device, helping students transfer what they know about print reading to e-reading, being aware of distractions, and remembering that an e-book does not replace good teaching. Something that comes with bringing technology into the classroom is teaching students how to use the technology brought in. Schugar et al., (2013) suggested, “For new users, even simple tasks such as opening a book, turning pages, and orienting the screen could be major deterrents” (p. 618). This means giving students time to explore once given the basics are important. Not forgetting or replacing print texts is something to remember. E-books have a lot of new incentives that print doesn't but kids can get value from both. With those features and incentives, teachers need to be aware of things that might distract the reader. Researching the right apps and making sure comprehension is still the main goal will be beneficial. The last consideration was that e-books do not replace good teaching. Teaching still needs to happen just like it would without e-books. Teachers should still scaffold and activate background knowledge when using e-books to teach (Schugar et al., 2013). These considerations will set teachers and students up for success in the classroom.

E-books bring numerous strengths to reading for students. Many researchers have mentioned one huge benefit to e-books being the interactive features that allow students to highlight text, see visual displays, listen to a text, and learn vocabulary terms (Schugar, Smith, & Schugar, 2013; Yokota & Teale, 2014; Morgan, 2013). All of these features are enhancements to the reading experience that print reading can’t necessarily give. Another
benefit is being able to differentiate reading instruction for students. With the amount of e-books becoming available, children have texts within their level easily at their fingertips. Morgan (2013) stated:

> When teachers allow young students to use technological resources with multimodal features, they encourage them to learn through visual, auditory, and kinesthetic formats, and this practice is beneficial for learners because they gain the opportunity to perceive content in many ways, and are able to adapt them to their own preferred learning style (p. 478).

Students are often more intrigued when using these types of texts. Struggling readers and/or readers who aren't motivated to read will often find reading e-books more interesting and engaging than reading from a regular picture book. E-books can provide many things for students that print reading simply can not.

Although there are many reasons teachers are bringing e-books into the classroom, there are also reasons teachers are choosing not to. de Jong and Bus (2004) argue that ultimately e-books are not the way to go when teaching young students to read. One study shows that multimedia additions like the visual and sound effects interfere with comprehension of the text especially for young learners (de Jong & Bus, 2004). Research also showed that students couldn't successfully get through an electronic text without becoming distracted but students were still able to recall many details about the text.

Print vs e-books is the big debate. Is one better than the other? Should one be used over the other? Can they complement each other? Most of the researchers agree a healthy
blend of both print and e-books is the way to go (Schugar et al., 2013; Yokota & Teale, 2014; Morgan, 2013; de Jong & Bus, 2004). There is no replacement for a teacher reading to students and the benefits that brings but also using e-books can help differentiate instruction and let students learn in different ways. de Jong & Bus (2004) also stated:

Electronic books, although perhaps not a satisfactory replacement for adults reading printed books to children, may nonetheless be a beneficial supplement to books read by adults, particularly when children are at a stage when their concepts of stories are just emerging (p. 381).

When deciding which type of book to use, thinking of what the outcome is is a good place to start. Some lessons will be better taught through print while some may benefit from an e-book.

In the end it’s up to the teacher to decide whether or not to bring e-books into the classroom. There are many factors to consider when making this decision. Yokota and Teale (2014) ask many questions that can help make the decision like: Do the interactive features maintain the integrity of the story? Is the story presented appropriately in digital format? and Do the features make sense with how children read and learn? Doing research and finding strengths and weaknesses can lead a teacher in what direction to go regarding e-books. Remembering that it doesn't and shouldn't be all e-books helps put things into perspective. Having a healthy balance of print text and e-books could be the ideal way to go.

**Conclusion**
In this chapter, I started by talking about how implementing technology in literacy can help differentiate for students and increase their learning. Then I went on to discuss motivation for students, parents and teachers. This section went through why technology would be motivating for students and how parents and teachers would get on board with using technology in the classroom. Literacy development was then discussed. Taking a look at what it looked like before technology and as technology was introduced. This then brought on the topic of new literacies and just how many ways this can take place. Literacy is no longer just printed text but rather now has the opportunity to make videos, read text online or on an app, make photo collages, or create digital stories. E-books was the last section discussed because there are many places you can read digitally today. There were many new features e-books could provide like highlighting text, vocabulary and interactive text that help enhance the reading experience. In the end, many researchers stated that technology is becoming increasingly important in the classroom (Smith & Throne, 2007). However, a blend of both traditional and digital might be the best solution of all (Yokota & Teale, 2014).

The next chapter will discuss a website designed to help primary teachers use technology to enhance literacy and differentiate in the classroom. The website will also give options for using both technology and traditional text to create a healthy blend of both. This chapter will go over an outline of the website guided by the research found in this chapter.
CHAPTER THREE

Project Description

Introduction

Through my literature review in Chapter Two, I gained many new insights that helped answer my research question: *How can the use of iPads in the elementary classroom enhance literacy instruction?* Considering how important literacy is in the primary grades along with our quickly advancing technological world, I wanted to know how to have both in a classroom. As I did my research for the literature review, it became even more clear that yes, we are in an advancing technology world and yes, literacy is one of the most important things we can teach our young learners (Forzani & Leu, 2012). Yokota & Teale (2014) helped provide knowledge on how blending the two can be a powerful thing. We shouldn't just be throwing away everything we know to replace it with technology but bringing some into the mix would be a good thing to prepare students for the future.

The literature review and talking with colleagues made a point about how sometimes people are stuck in their ways and scared to step out of that comfort zone. Clarke & Zagerall (2012) state that if teachers aren’t familiar with technology they are way less likely to use it. However, Gervetti et al., (2010) have talked about if we don't bring new literacies into the classroom we will be doing our students a disservice. I hope this website is a place where educators new to technology can start. Hopefully, they find something that sparks an interest and just give it a try. My intentions for this website was for a wide range of educators to consider it a resource.
This chapter will highlight some of the research found from my literature review. It will also talk about why creating a website was something I wanted to do as well as why I chose the content I chose. This chapter will discuss who this website will benefit and who the resource is intended for. Next, I will talk about a timeline for completion and when I plan to implement and start utilizing the tool. It will then discuss how the website will be laid out and what you can expect to find in the website. Finally, this chapter will have a brief summary, following a look into Chapter Four.

**Research Paradigm**

This website is a resource for educators to use as they begin to use technology in the classroom as well as for enhancing and enriching literacy in the classroom. Educators are always learning and looking for ways to keep things interesting. This website is a place for primary teachers to find apps to help with different categories of literacy. Teachers can also find ideas on how to blend both curriculum and technology. I chose to create a website because technology is constantly changing. A website gives me the opportunity to update information based on new research or apps that become available.

**Rationale**

Hicks (2011) says, “In today’s educational system technology is inevitable. Technology ultimately boasts many benefits when used in the classroom and can enrich the learning experiences of students” (p.188). Technology is becoming a part of our everyday lives. Bringing technology into the classroom seems more and more natural every year because of how much it is advancing. Creating this website will provide primary teachers the opportunity to explore different technology, mostly apps that would
work well in their own classroom. I believe the best way to start using technology is to jump in and try something you find interesting. Technology can be scary for some, but starting to explore is a good way to start. Let students test out an app you find interesting. They will quickly give you the answers needed as to whether that app is right for your students or not.

Literacy is so crucial in the primary grades. The most important skills to ensure students success in reading later in life come from the first few years of school. Because literacy is so important, it can feel overwhelming to get all of the skills students need incorporated into daily routines. We all strive to reach students individual goals and differentiate as much as we can. With the ability technology has to get instant access to e-books, magazines, purposefully built apps and individualized features, a device can be used to easily switch between one text and another (Sheppard, 2011). The resources available can help students go beyond the text as well (Sheppard, 2011). Some technology suggestions on this website are apps that individualize for every student, taking some pressure off of the teacher. The website also gives primary teachers an option for giving extra practice with all the essential literacy skills through technology. Some apps are an extension of an activity, others could become a part of everyday practice.

The website features many apps that have to do with practicing literacy skills but some will also have lessons and/or ideas on how to bridge print text with technology. Through the literature review in Chapter Two, I found that although technology is becoming increasingly advanced and we are seeing it in more classrooms, it should not
be the end all, be all. In fact, many researchers and articles talked about how utilizing both can have the best results for young children. Yokota and Teale (2014) say “we believe that both print and digital picture books should play central roles in early childhood literacy education” (p. 578). The power of finding a balance with both traditional text and technology could be huge.

**Setting and Audience**

The targeted group were students in grades K-2. The website has many different app options with the purpose of using them to enhance their literacy skills. The apps and resources in the website are most relevant for students in grades k-2. The hope is for students to be able to become familiar with different areas in technology so in the future they will continue to feel successful. The classroom is a great place to explore and learn new things about technology. Years from now when students are entering higher grades, college or the working world, students can feel confident in this technology driven society. While exploring and using the apps, hopefully students will gain knowledge on the skills being taught in a new perspective.

The website was created for teachers of students in primary grades who are looking for additional options to enhance their literacy instruction. The goal was to have a website that will help teachers blend traditional teaching with technology. I intended to have a wide range of apps that can be used for all different parts of literacy. The website also includes different lesson ideas, resources and activities to incorporate the technology into different parts of the day. Another goal was for this is to be a resource not only for primary grades but for any grade looking at ways to use technology in the classroom. I
hope the website is seen as a useful resource and ready to bring straight into teachers classrooms.

The intent for this website was to have an online resource educators can easily access and use. A big reason I chose to create a website is because of the accessibility for a wide range of people. The website will hopefully be a place teachers can go to find ways or ideas on how to bring technology into their literacy block. I also think this website can be a great resource for teachers who are interested in just beginning their technology journey in the classroom. I will have lesson ideas on how to use technology for different parts of a lesson which may be a great integration.

**Timeline**

I completed my website during the capstone project class. I took GED 8490 Capstone Project summer of 2019. Throughout the class I created the main website, added the categories of literacy, researched and added apps for each category and linked resources to each of the categories. I also found and added lessons for the apps that can be used to integrate both traditional learning and learning with the use of technology. The website was ready to use during the 2019-2020 school year.

**Project Design**

**Main page:** This page gives a general idea of what the website is all about, what you can find, and why it was created.

**Reading:** This page gives ideas for apps that let students listen to e-books and/or those that let students read books.

- Apps: EPIC! (Donahue and Markosian, 2013), TumbleBooks (Tumblebooks, n.d.)
Phonics: Phonemic awareness is such a crucial skill in the primary grades and sets students up for success in the future. Apps included on this page help build their sense of letter recognition, sounds and how to manipulate those sounds into words.

- Apps: Lexia (Lexia Core5, 2013), Starfall (Schutz, 2002), Teach Your Monster to Read (Usborne Foundation, n.d.)

Comprehension: Being able to read words in a book is not all that counts. Having the ability to tell about what you read is just as or more important. Apps on this page help students practice reading stories for understanding.

- Apps: Raz Kids!( Learning A-Z, n.d.), Think-In (Think-In, 2017)

Vocabulary: Building children’s vocabulary is so important and can set them up for success when they move into the upper grades. These apps help students practice
things from matching letter sounds and practicing sight words to exploring and
identifying new vocabulary words

- Apps: Sight Word Ninja (Sight Word Ninja, n.d.)
- Description
- Teacher/Student/Classroom Use
- Lesson Ideas

**Writing:** Writing formation and learning to write a good story are part of the
foundation for young learners. Students spend a lot of time the first year or two learning
how to form letters, write sentences and complete paragraphs and/or stories. These apps
help reinforce all of those skills

- Apps: Toontastic (Toontastic, 2017), Book Creator (Red Jumper, 2011), Writing
  Wizard (Writing Wizard, n.d.)
- Description
- Teacher/Student/Classroom Use
- Lesson Ideas

**Cross Curricular:** The intent for this page was to explore apps that can cross
between literacy as well as other subjects.

- Apps: SeeSaw (Graham, Lin and Sjogreen, 2013), Google Expeditions (Google,
n.d.), PebbleGo (Capstone, n.d.), Popplet (Popplet, 2013), Time for Kids (Time,
2016)
Summary

This chapter started off by reintroducing my research question, why I chose it and what important things I found. Then it went on to discuss the research paradigm, rationale, setting, audience and the timeline for completing the project. I wanted my website to be a useful resource for primary teachers and other educators. The website will be able to help teachers plan purposeful technology in the classroom for their students. The rest of the chapter was an outline of what my website looks like and includes. The main page is a place for educators to get a feel for the website, learn why I created it and get an overview of what they can find while on it. The subpages are all categories that fall under literacy. Within those they will find apps and ideas on how to use them in their own classroom.

Chapter Four will be a reflection of my completed project. I will discuss what I learned from the literature review and creating the website, what limitations may have been faced and what future considerations. This chapter will also discuss how I see the website as a resource for educators not only now but in the future and how it could change as technology continues to change.
CHAPTER FOUR

Conclusions

Introduction

The research for this project led me to answer the question: *How can the use of iPads in the elementary classroom enhance literacy instruction?* Working in an elementary school with young learners who are surrounded by technology, made me want to see how technology could best be used in the classroom. I wanted to know if there were best ways to implement technology and if technology was something worth bringing into the classroom. I also found it important to find out whether students benefited from using technology and how much technology they should be exposed to.

As a way to present what I have learned and to create a useful tool for teachers, I created a website. The website is a place where teachers can go to learn more about apps they can bring into the classroom and ways to integrate them into the curriculum. The website has different apps for different sections of literacy, example lessons, activities and blogs that will help teachers find apps that are right for their classrooms. This chapter will explore the learning that happened during the process of researching, writing and what I learned. It will also review the literature that helped guide my project, any implications or limitations of my website and future research. The next sections will discuss how I can communicate my website to others and possible benefits to the profession.

Learnings
Writing a capstone paper is a process I never thought I would be able to accomplish. There are a lot of things that go into researching and writing a paper, let alone a capstone paper. Even though this task seemed nearly impossible, I knew it had to be done. Therefore, I also knew I would need a good plan. It took me a few tries to look at what seemed to be an overwhelming assignment before I could fully wrap my head around the process. With good courses, careful planning and organization I was able to dive in one step at a time. I have learned many different things throughout the process of writing this research paper. Some were about the research itself, some were about how to write such a large paper and some were about creating a website for the first time.

I have learned a lot throughout the capstone process, but I have to say the research was the most challenging and rewarding one of them all. Going into writing my capstone, I was very unsure of how I would ever write the Chapter Two literature review but with careful planning and a lot of support, I accomplished this goal. One success of the research section of this paper was finding all the resources and physically writing over 20 pages on a single topic. At times finding research was difficult because I would come to a source and it wouldn’t be quite right or not what I needed. Over time, I learned different places that worked best to find quality research articles for the content I needed. Keeping all the resources organized was another big task. I had to find ways to keep all the amounts of articles and pages I was reading organized because otherwise that became overwhelming too. Again, I made a plan for the research and kept articles in different sections based on where I thought they were going to best fit in my paper. Reading through so much content was something I was nervous about but proud of for
completing. It takes a ton of time and energy to gather all the information you need for your research but it was accomplished and I’m proud to say I did it.

Writing was another part of the whole process I found slightly intimidating, but knew I could handle it. I have never considered myself a great writer, so having to write such a large paper made me nervous. I knew right away I would have to make a plan one step at a time to accomplish this goal. Two things that made me the most nervous were the grammar side of writing and citing all my sources. There are so many grammatical things that can be found or used that I was concerned about how that part would come together. Luckily, through Hamline, many people put eyes on my paper and were able to help see and fix some of the pieces I didn’t know or forgot to do. Citing sources was another hurdle to jump but that too was done because others got to read and review my paper. I also practiced writing citations from previous courses which helped a lot and was something I could go back to and reference. Research writing is another level of writing and it really does take a lot of people to make one paper great.

Creating a website was a task I was actually really excited about. I enjoy using technology and was excited to try something I have never done before. However, creating a website and finding all the information I wanted for that taught me a lot as well. I had never created a website before so figuring out what website program to use, how to add content, links and images were all new to me. However, though frustrating at times, I enjoyed doing all of it. Looking for the content I wanted to use and figuring out if they were quality apps took a lot of my time. I didn’t want to put any app on my website that I wouldn’t use in my own classroom. Therefore, doing research, trying the app and
reviewing each one was especially important to me. There are always challenges when you try new things but it’s exciting when you get to the finished product and are proud of what you’ve made. I am proud of the final product of my website and believe it can be a helpful resource for many teachers looking to incorporate technology into their classrooms.

This process has helped me grow in many ways including as a researcher, writer and teacher. I can say I have learned many new and useful skills and am a better educator because of it. As an educator, I feel I have grown and gained knowledge I am and will be able to apply to future classes and teachers. I have useful tools in my tool belt that I will be able to share with colleagues.

**Literature Review**

The research for this capstone led me through many articles, studies, websites and more that helped shape what I thought my project was going to be. I knew early on I was interested in creating a website but what I wanted it to focus on and center around, I wasn’t sure. Literacy and technology are pretty broad topics so I needed to come up with what I wanted to focus on within those two topics. After refining my search, I was able to find resources that guided my paper and eventually guided what I envisioned my website to include and look like. As I continued research on my topic I discovered a few pieces that were important to creating my website which included implementation of technology, motivation and the use of e-books and other apps.

Implementation of technology is something I focused my research on. I was aware that there are many different ways, ideas and options on how to implement
technology into a classroom but I was looking for what worked best for students. The process of implementing iPads in your school can be a long process that involves many steps including planning before devices have even arrived at your school and familiarization with them, evaluating the use and apps for teachers and students and a review after they have been used to evaluate whether they are beneficial or not (Clark & Luckin, 2013). However, if you already have devices available in your school or classroom, getting started using different apps doesn’t have to be such a long process. I’ve learned to pick an app I think might fit in my classroom, review it myself and let students try it out. Students are the best indicators of whether or not an app is going to actually work in your classroom. On my website, I wanted to create a place for teachers to go that covered all the bases under the literacy umbrella. That way teachers don’t have to go searching under many different websites to find what they are looking for. My website can help teachers implement different apps with ease.

Another significant part of my research was motivation for teachers and students. I found that teachers aren’t always motivated to try something new for a couple different reasons. One reason being teachers often like to stick with what they know. Another reason is because technology scares some people. Not all teachers are familiar with iPads and apps that can be used in the classroom. This gave me even more drive to make this website because one of my main goals was to give teachers a place to find apps in an easy way that they can bring into their classroom. On my website, I give details on all the specifics about each app and have activity ideas, lesson examples and blogs to check out further if needed. I understand as a teacher that time is precious and we can’t spend hours
searching for something great because we just don’t have the time. My hope is that my website has a enough of a variety of quality apps to choose from that every teacher can find something they would want to try.

Students are another part of having motivation to use technology. Through my research and being in the classroom myself, I have found students are very motivated by devices and are often highly engaged when they get opportunities to use technology. Part of this comes from the society we live in. Kids coming to school often know more about technology than the teachers do. It’s important for teachers of young students to let them explore but also teach them the basics of apps you choose to use. Students are so quick to catch on to technology that with just a little instruction, they will be off and soaring on whatever app you choose.

E-books came up quite often when researching how to implement technology into a classroom. Even though e-books are just a part of what is out there in regards to apps that can be used, I found they could make an important first step in introducing technology to students. Schugar, Smith and Schugar (2013) state “teachers can help their students transfer their existing strategies to the arguably novel experience of reading an interactive e-book” (p.619). There are a lot of features in e-books that, if taught correctly, can enhance the reading experience for students. Technology is a privilege and students need to be taught that in order to have a successful classroom with technology.

Throughout all my research, I feel confident in the website I created and all that I have learned along the way. Technology is not the end all be all and that is something I have brought into my website. Research has shown me, a healthy balance of traditional
print and technology is what’s best for students. Therefore, on my website, I included many ways to incorporate technology with curriculum or standards that you already teach. Technology is a great opportunity for learning if used in a careful and purposeful manner.

Implications and Limitations

This website could be a resource for administrators and staff who are interested in a more innovative experience in their school or classroom. The main use for this resource will be for teachers to explore all kinds of different apps that could be incorporated and enhance literacy instruction. Teachers or any educator can look at the categories that include reading, phonics, comprehension, writing, vocabulary, and cross curricular. Each of these categories has different apps that fall under that section of literacy. Educators will get to use and try apps that will bring technology seamlessly into classrooms. Every app has detailed information about what the app is, features of the app, what the app can be used for and examples of how to use it.

My website will hopefully be a useful tool for teachers and educators to use when they are looking to implement technology into the classroom. My hope is that teachers will feel comfortable navigating through the website and finding apps that best suit their classrooms. With all the information included on the website, I intend for teachers to be able to choose one and try it out easily in their classroom. This website can support teachers along their journey into exploring technology and possibly bringing it into curriculum. Although this website is targeted toward primary level teachers, any age group could benefit from the apps included and can be differentiated for different grades.
Although I aimed my website to be used by any educator wanting to incorporate technology, there are a few limitations that educators could come across. One limitation that would limit the use of apps on my website would be access to devices. There are a few apps that can be used on a computer but most are best used on a device like an iPad or tablet. I’m aware that some schools don’t have access to any tablets at all and some have limited access. If schools or teachers have even a few devices, most apps would be beneficial in the classroom and could be used for small group instruction and/or a literacy center.

Another limitation that may come up would be internet access and access to social media. Many schools have policies for social media determined by the district that may limit access to some apps. My school also has a process for getting permission to download apps to our iPads. Therefore, certain apps may not be approved by the district to add on devices available. Some apps include letting parents be involved in seeing and accessing the app. For families that may not have access to computers, tablets or internet, this would be a limitation for them.

**Future Research**

This project has potential for future research in a couple ways. One aspect I would like to research further would be more categories or apps to add to the website. Another possibility for future research would be to find out other devices or ways to use technology in the classroom. Both of these topics could help increase the appeal of the website and keep it up to date.
Literacy has so many different subcategories to it that I feel my website will always be something I could research further and find new and relevant information to add to it. On the website, one category I don’t have much content on is fluency. Like every other strand of literacy, fluency can play a role in students' ability to read. At the young age of the kindergarten and first grade students I have worked with, this can be a struggle. Finding ways possibly with technology to practice and reinforce this skill is something I can see myself researching in the near future.

Most of my paper and a great majority of the website include ways to use technology through iPads. However, I am completely aware that there are other devices out there that would benefit students learning as well. Researching to find out what are pieces of technology are being used and how they are being used would be another great addition to the website. My school itself has smartboards, computers and a green screen that could be utilized more than they are. As I’ve said throughout this paper, technology is becoming our future. Therefore, continuing to research and find useful and purposeful ways to use it would benefit the website, educators and myself.

**Communication**

The website will be a great way to communicate and help implement the results of my research. By creating a website educators will be able to access this from all over as long as they have internet. My website will be able to be searched and used as a resource for teachers looking for ways to use technology. I plan to share my website with my colleagues, school and teachers around my district in hopes they find it helpful as well. Exploring my website with others will help guide discussions about what others are
already implementing and if any apps would be something they are looking for.

Collaborating with colleagues through my website will also allow me to see what needs
are still out there and may help guide future research relating to technology and/or my
website.

My website will also be a great way to connect and communicate with other
educators not in my district. My intentions are to continue to add and keep the website up
to date with new and innovative ideas on how to use technology in the classroom. While I
hope other educators find my website to be a useful resource, I also plan to implement
some of the apps I included. Through doing this I will be able to better communicate
what apps are best for certain levels of students and how they work within my own
classroom. I will then be able to communicate my personal findings with others and
potentially have conversations with educators implementing the same apps. Continued
communication will help my website continue to stay up to date and relevant with current
times.

**Benefit to the Profession**

This capstone project was intended to blend the traditional teaching a lot of
educators are used to with the new and innovative world of technology we are heading
toward. Initially, I picked this topic because of my personal interest in incorporating more
technology into my literacy block. I started teaching just a few years ago when
technology was on the rise and my first teaching experience was at a school that was very
technology driven. Because of this, I have always been interested in having technology
be a part of my classroom. I believe technology can be very engaging but knew not all
technology was for the purpose of learning. Through my research I have found the best ways to implement technology, how to best use technology and suggestions on how to incorporate technology without ditching the curriculum.

Another benefit my website will be to the profession is sharing it with my colleagues and other educators. There are many teachers who are still hesitant toward bringing technology into their classrooms. I fully intend for my website to be a resource for those teachers to explore and find something they may be willing to try. With the information included and examples on the website, teachers should be able to find something they can implement with ease. Navigating this world full of technology can be challenging but I strive for my website to be a helpful hand in educators journey with technology.

Conclusion

In this chapter I have discussed my learnings and findings based on my research question: How can the use of iPads in the elementary classroom enhance literacy instruction? This chapter has also let me reflect on what I’ve learned along the way. Because of this process I have become a better researcher, writer and teacher. In this chapter I discussed how my research question guided me into making the decision of creating a website full of apps for teachers and educators to use. I also went on to discuss what I learned from the process of researching, writing and creating a website. Another section of this chapter reviewed the literature I researched and used to create a useful tool for educators interested in blending traditional teaching with technology. I also discussed possible implications and limitations as well as future research. Lastly, I talked about
how I will communicate my website to educators and colleagues and possible benefits
my website will have on the teaching profession.

The capstone process has been one with many challenges but also many rewards. I have learned a great deal about many aspects of writing and creating through this journey. I believe my capstone will be beneficial to many educators looking for technology to bring into their classrooms. My hope is that teachers find use out of this website, find it easy to navigate and a resource they will refer back to in the future.
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Appendix

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