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Raeanne Gardner

California State University, Monterey Bay

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Breaking Down Classroom Walls: Increasing the Effective Use of Educational Technology

Raeanne Gardner

California State University Monterey Bay

Author Note

An author named David Warlick encompassed the beliefs of this capstone's author in a quote "We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world". I would like to thank all my teachers whom have helped me get to this point, from kindergarten to 2014. Thank you, I appreciate all your hard work. I would also like to thank Crystal Nimmons, Celeste Fama, and Niel Macdonald; all of whom allowed themselves to be interviewed for this project. Last, I want to thank my friends and family for always encouraging me to keep going. It is my hope that this document interests or informs you in some way. Thank you.

Abstract

The focus of this capstone was to discover what technology is being used and how it can be better used in a classroom setting. Interviews with two teachers and one school technology assistant were conducted. Through these interviews it was found that many teachers are not effectively prepared to use advanced technology and as such tend to be wary around different classroom technology. Additionally, even though school boards are now expecting students to do testing on computers they are not providing sufficient preparation for students or teachers for any sort of in-class technological use. The action taken was the creation of a blog intended for use by students and teachers. Applications, websites, and educational videos are posted and briefly explained. People are creating new ways of learning topics in different ways outside of the classroom that can be beneficial to begin utilizing inside the classroom.

Breaking Down Classroom Walls: Increasing the Effective Use of Educational Technology

If you could, dear reader, whomever you maybe, I would like to ask you to think back to your own days in a classroom.

Setting The Stage

Do you remember what sorts of technology your grade school classrooms used? Those that belong to my generation will most likely agree to the fact that a wide range of technology was not used in their classrooms. Personally, the most technology I had were overhead projectors. I am sure you remember the projectors, they were wheeled to the front of the classroom, they were kind of loud, the lights had to be turned off, the square light would hit the board, and your teacher would get the plastic sheet and proceed to write on it. When it was your turn as a student to write on them, it was the worst! The plastic overhead sheets smudged, slipped around constantly, everyone was awkwardly staring at you, and they were hard to place so all the information was shown on the board. You may also remember the big boxy television that your teacher would wheel in. That meant you were either watching Bill Nye, a man who taught science to children in an engaging way, or an “educational” movie that no one ever wanted to see and rarely made a strong connection to the subject being taught.

In present society, technology in the classroom continues to evolve and upgrade. Through my own experience and through my informants, it can be said that both projectors and televisions are still used in the classroom, however each of these products are more refined than past versions. Further, items such as desktop computers and iPads are being used in classrooms as well. In 2002, computers were just beginning to come into use as I moved through Elementary and Middle school. As such, I hold a much different perspective on the use of technology in classrooms than the children of today’s classrooms. When computers were first being integrated they were boxy desktop computers and the most that was done on them them was create a PowerPoint presentation. In today’s society we have the ability to access so many avenues of learning and teaching with the different technologies we are offered.

A Bit of Background

My research topic is the use of technology for educational purpose in a kindergarten through twelfth grade classroom setting. From reading different opinions throughout this process, it is my belief that there is a great educational significance to using technology in the classroom. In terms of the use of technology in classrooms and the argument for or against it, I have to agree with the belief that “Technology and education are a great combination if used together with a right reason and vision.” (Saxena, 2013). Technology is not going away, it is only improving, therefore why should we, as teachers not take the opportunity to manipulate technology to be beneficial to our classrooms?

There has always been the looming presence of change in the classroom. In 1925 Thomas Edison stated, “books will soon be obsolete in schools. Scholars will soon be instructed through the eye” (Dunn, 2011). I have found this topic interesting because technology as we view it today is not something that was present in my early education. There are many different learning avenues available to the children in schools right now, that was not even thought of 10 years ago. It is a fascinating thought how much can change in such a short period of time. I am interested in seeing the difference the introduction of technology has made in the way that teachers teach and the way students learn.

In fact there are quite a few ways in which technology is beneficial to the furthering of education. With the introductions of technology, teachers now have more opportunities that allow them to lecture more effectively and students can even learn from those they would otherwise never have the opportunity to gain information from (Clemmitte, 2011). For example, teachers have the ability to share information and interact with other teachers and faculty all over the world. This opens up a whole new door that leads into learning ways to teach that educators may never have thought of on their own. Another advantage is that students who have access to different technologies have more options for learning. Moreover, gathering information can occur at a faster pace, which may be better for that individual student.

Using technology for education also opens the possibility of instilling comfort and a personal pace for each student. Online classes are extremely popular as a way to learn at one’s own pace without the normal pressures of face to face classes. This can be a huge influence

seeing as some students work better without the pressure of face to face interaction (Saxena, 2013). With the use of technology it is so much easier to share knowledge between students and teachers. A lot of learning happens when students interact with other students, everyone has the capacity to be a teacher. Allowing the students to work through multiple avenues and telling their classmates how they got to a point can be extremely informative. (Johnson, 2006, pg 14). Using technology in classrooms is not only beneficial to students, teachers can benefit from other teachers using technology as well. Teachers should share what they are doing in terms of technology in the classroom, whether that be through a school blog or a bulletin board in the teacher's lounge.

There are many people who should be interested in this topic, including: future teachers, current teachers and staff, those who are studying child development and anyone who is the parent or guardian of a child. Rowan (2013) illustrates why these people should care. Simply put, it states that families have changed in very visible ways. Children used to move around and go outside and interact on a more cohesive level than they do nowadays. In today's society families interact through a multitude of technological ways, be that with communicative technology or entertainment technology. Rather than going outside children are finding their play and entertainment on bright little screens (Rowan, 2013).

There has been many different so-called technologies that have been used in classrooms over the centuries. According to Dunn (2011), this includes the use of Hornbooks in the 1650s to the use of pens in the 1940s and the introductions of scan-tron machines in 1972. While the history of technology is not the focus of this research, it is an important piece of information to take into consideration when looking at where society started and where we have progressed to. This being so, the type of technology people picture are now automatically items such as computers or iPads. On this note, in 1984, "Public schools in the U.S. averaged about one computer for every 92 students" (Dunn, 2011). Technology is ever fluid, it is constantly changing and evolving. The best hope educators, students, and the common person has is to assimilate and accommodate to the new changes.

Some schools have begun implementing a program called BYOD. This stands for Bring Your Own Device. Price (2014) states that schools with this program are encouraging their

students to bring their own personal devices, whether that is their personal laptops, tablets, phones or “other Internet compatible devices” to act as learning aids (Price, 2014). This option costs less overall for the school as a whole. However, some say that it is unfair because it leaves out the students who do not have access to personal devices. This being said schools could easily have class sets with a couple of educational devices for those who do not have access to the same technologies (Price, 2014). Morrison (2014) states that the BYOD program in addition to be more cost effective for schools helps to teach students the responsibility of taking care of their own property (Morrison, 2014). Schools should be embracing and using the technology that their students will have on hand, it is not going away anytime soon.

Another interesting way of using technology in classroom settings is implementing a “flipped classroom”, an idea brought to light by Salman Khan. Khan creates educational videos and uploads them to YouTube. Originally he had seen instances where teachers began to assign his videos for their students to learn from instead of they, themselves lecturing about the information. In turn, teacher would then use their class time to go over questions and problems that one would find normally being done as homework (Khan, 2012, pg. 115). This is quite interesting because it allows for the students to learn at their own pace. Additionally they have the ability to go back to subject or idea as many times as they need to understand it. Then in coming back to the classroom their peers and teachers are around to help them with any questions that pop up immediately. Instead of learning the information, going home thinking you have it all figured out, attempting the homework, and finding out you are completely lost.

Bandura’s (1986) theory of self-efficacy focuses on the belief one has in his or her self to complete tasks or reach goals. (Bandura, 1986, pg 391). Specifically I examined how self-efficacy applied to teachers. As such teacher-efficacy is the teachers’ confidence in his or her her ability to promote their students’ ability to learn. Laura Bockman stated that “the more comfortable teachers are with the material, that they are working with the better their confidence will be about the future of their career” (Bockman 2013, p. 6). This being said it is imperative that there is the proper types of technologies in the classrooms. Johnson (2012) suggests that teachers do not have endless amounts of energy or time to dedicate to the ever changing aspects of life. This being said he questions why we should not invest in technologies that will be long

lasting and beneficial to all students (Johnson, 2012, pg. 2). Picking out an up-to-date form of technology, becoming familiar with it, and using it to help students does not sound too terrible.

Okojie, Olinzock, and Okojie-Boulder (2014) state, “ The role of technology in education can only be determined if teachers who implement technology at the classroom level are involved in technology decision- making because teachers have the responsibility of facilitating instruction” (Okojie, Olinzock & Okojie-Boulder, 2014). In my research I have come across one point that I agreed with instantly. That being, “Technology [will not] make a poor teacher a good one. But it can make a good teacher even better. And it can help make great teachers whose students remember them for the rest of their lives.” (Johnson, 2012, pg 46). That said, the need for sufficient preparation for the proper technology is a requirement.

Through interviews done with educators currently working with technology I have found that implementing programs or computers or any other technology without proper preparations of those using said technology is not a positive decision. This year most, if not all, schools will be beginning the use of the Common Core Standards (Smarter Balanced, 2014). The Common Core Standards testings are being developed and supported by a company named Smarter Balanced. This company has developed an assessment that conforms to the new Common Core (Smarter Balanced, 2014). The Common Core calls on students to take tests off of computers and teachers are expected to teach their students how to use the computers and the information that will be on the test. This information led me to question what is being done to prepare both students and teachers for this new way of learning and testing. From research, I can say that the answer so far, is: not much.

I have identified a gap in the literature regarding how schools are preparing their students for the new Common Core. Fink (2014) states that students will be expected to be able to complete the test. (Fink, 2014). This means that students will be expected to know how to use a computer including how to effectively use a mouse, headphones, a microphone, and the keyboard. Currently there are few signs that there will be a program in place to help prepare the students and teachers for the computer based testing by the time it is rolled out. Fink (2014) states that in order to make sure students are prepared for testing, teachers can :

Make sure they have experience with writing on computers and have mastered basic

keyboard and word-processing skills. Help them view and manipulate graphs and spreadsheets, as appropriate for their grade level. Encourage them to use technology often, and make sure they have ample opportunities to do so at school. Many students regularly use computers and tablets at home, but for others access is limited outside of school. (Fink, 2014.)

The research has brought to the forefront the opinion that everyone expects the teachers to take time out of their already packed teaching schedules to also teach their students how to work a computer. However, it is not expressly what technology we are using or even the fact that we are using technology, the most important part is how we use this technology (Morrison, 2014).

Method

The use of technology in the classroom has greatly increased in the recent years. What used to be an old t.v. and a projector are now apps, iPads, and interactive Apple T.V.s. The youth in our society will never again know a time without some sort of technology being used. More often than not these kids walk into the classroom already knowing how to work cell phones, iPads, etc. It is our responsibility as teachers to use this to our advantage and start teaching in a way that incorporates this part of our lives.

Context

The informants gathered worked at three separate schools. Pinewood School in Los Altos (Macdonald), Athenour Elementary School in San Jose (Fama), and King Elementary in Seaside (Nimmons). Pinewood School is a private school serving students from kindergarten through twelfth grade (Private Schools, 2014). According to the National Center for Education Statistics (2014), Pinewood School's student body consists of approximately 192 White, non-Hispanic students, 93 Asian/Pacific Islander students, five students with multiple races, four Black students, and three Hispanic students enrolled on average (PSS Private School Universe Survey Data for the 2011-2012 School Year, "Pinewood School"). Pinewood has relatively small class sizes, on average Kindergarten has 7 students, First and Second have 14, Three through Sixth grade has 18 and Seventh through Twelfth has 12 students. The mission statement of Pinewood is to

“Ensure all students learn from passionate experts. . . , create a disciplined yet joyful culture of public self expression. . . , uphold high academic expectations. . . , set grounded examples for moral behavior. . . , and lead students through a proven curriculum that fosters creativity , passion for learning, and further exploration. . .” (Private Schools, 2014).

Athenour Elementary School is on the Appleseed Almaden Montessori campus, which is a private school. Athenour’s official name is ‘Athenour Early Childhood Education Center’ (Athenour Early Education, 2014). The school itself provides preschool, transitional kindergarten, preschool assessment, speech/language pathologists, and a school psychologist (Athenour, 2014). The majority of the students are either of the Caucasian and Asian/Pacific Islander ethnicity. Because of the confusing connections to Appleseed, there was not much information on just Athenour specifically.

Martin Luther King Elementary is a public school located in on the Monterey Peninsula in Seaside. According to the National Center for Education Statistics (2014), the majority of King’s student body are Hispanic with 291 students, 48 Asian/ Pacific Islander students, 29 Black students, 14 White Students, 11 Multiple Race students, and three American Indian students. (CCD Public school data 2011-2012 school year, “Martin Luther King”).

Participants and Participant Selection

Researcher. The researcher was CSU Monterey Bay, Liberal Studies Major, Raeanne Gardner. For as long as our researcher is able to recall, she has wanted to work with children in some capacity. Raeanne is qualified to carry out this research because she has worked with multiple different types of children in different settings and currently knows how to work a multitude of technological items. A bias that emerged during the study is the researchers belief that technology in the classroom is a hindrance. This would be because the researcher viewed it as a distraction and did not understand just how it could further the learning of the students. When our researcher was in Elementary school, her classrooms did not use technology beyond the occasional overhead projector or old television. Computers were not in every classroom, Second graders did not have cell phones, and iPads did not even exist. However, once Middle School came about, things began to change. The classrooms were getting computers, computer

labs were opening up, and cellphones were emerging. Through immersing herself in the research of this project, Raeanne has come to realize that using technology correctly in a classroom is not a hindrance. If done effectively, technology could help create a positive learning experience.

Informants. The criteria for the informants in the current study included: employment in a school, and each used classroom technology. This criteria lead way to the possibility of previously being acquainted with each of the three informants. The first informant was Niel Macdonald, a Tech Support staff member at Pinewood School. The second informant was Celeste Fama, a special education preschool teacher at Athenour Elementary School. The last informant was Crystal Nimmons. Nimmons is a kindergarten teacher at King Elementary.

Semi-Structured Interview and Survey Questions

1. What are your experiences with the use of technology in the classroom?
2. What technological resources are available for the classroom?
3. What are you concerned about when it comes to the use of technology in the classroom?
4. What do you see as the benefits?
5. What do you think should or could be done to improve the use of technology in the classroom?
6. What would you like the use of technology in the classroom to do for you, your students, and their learning?
7. How has the use of technology impacted student learning?
8. How can teachers improve their use of technology in the classroom?
9. What are some barriers or challenges to improving how teachers use technology in the classroom?
10. Is there anything else that you would like to say about improving the use of technology in classrooms?

Additional Questions with Informant # 3.

1. What types of tech support is available to you right now?
2. Was there any training that you received for the programs that you are expected to use?

Additional Questions with Informant #2

1. In regards to tech support, does the school have its own tech person?
2. How often do you have access to them?
3. What is the turnaround rate for a problem to be corrected?
4. Have you seen an improvement in the students throughout the years with the use of tech? How so?

Procedure

My first step was to refresh myself on the topic of the use of technology in the classroom. Second, I found what informants I wanted to interview and I contacted them. I was given the go ahead to email all three informants at that point. Next, came the interviewing. The interview with Informant #1 was held in a relaxed setting without many distractions. The answers that he gave to the provided questions were recorded to be copied down at a later date. The interview with Informant #2 took place in her classroom after school, with limited interruptions. Informant 2's responses were collected via laptop. In the interview with Informant # 3 it was broken up into two parts. The first part was done during the school day, with multiple distractions and limited time. Her answers were quickly jotted down to be reworded at a more convenient time. The second part was done via email. The last step I took was to go through and analyze the responses I received from each informant.

Data Analysis

The researcher looked at the responses to see what each informant was concerned about and what they thought were positives regarding the use of tech in the classroom. From there the researcher looked to see if there were any similarities or differences that stood out to her. After this she brainstormed possible ways that make tech of better use for the classroom as a whole.

Results

When looking at the responses I received from my informants I looked for the recurring themes. The questions focusing the data analysis were what should teachers and those interacting with technology and classrooms do involving technologies in the classroom, what were any hindrances, and what did each informant know about technology? Once again my informants

were Celeste Fama, a Preschool teacher for Special Needs children, Crystal Nimmons, a Kindergarten teacher, and Niel Macdonald, a Tech Support staff member. The themes that emerged were the importance of not being afraid of the technology you are facing, what is lacking, and the improvement of multiple aspects.



Do Not Be Afraid

This theme is an important one. The students will know if you, as a teacher, are nervous about a new concept or medium. This can cause them to become nervous or doubtful and lose confidence in themselves. I have seen students become more engaged in a lesson when technology is introduced into the classroom. From SMART boards to Apple TVs to Computers to iPads, technology breaks up the monotony that is the teacher's lecture. And allows more participation on the students' part.

Technology can seem 'big and scary' if you do not take the time to understand it. "Be fearless with technology and do not feel it is too complex to use" (N. Macdonald, personal communication, October 12, 2014). There are multiple ways in which one can acclimate to new technologies or applications that leave the prospect of using tech more approachable. Remember, Google is your friend! So is YouTube, there are thousands of people who will upload videos telling you how to do this or that, use it! You also have the choice of looking up websites and

blogs run by other teachers, where you can see what they are doing and how they are doing it, use this! (N. Macdonald, personal communication, October 12, 2014). The students that you are going to be teaching will, more than likely, already be familiar with some spectrum of technology. Teachers need to be just as-if not more- comfortable with the technology they are introducing into their classrooms. In a like manner, we as teachers should share what works for us. New generations are going to be more comfortable with some things than older ones. Since this is the case, do not be afraid to share what works in your classroom and brainstorm with your coworkers in order to create lessons that are more intriguing to the students (N. Macdonald, personal communication, October 12, 2014). Do not forget to use your colleagues, as you are all in the same boat; or classroom, what have you.

With this in mind, do not be afraid to take classes that will improve your understanding of what it is that you are planning to use. (C. Fama, personal communication, October 10, 2014). A proper understanding comes from learning, from being trained, and having professional development available to you. This was a recurring point in all three interviews. Every one of my informants stressed the need for proper training for the impending technologies. How are you supposed to teach your students if you do not understand the medium yourself?

In essence, do not be wary of technology. There are going to be upgrades and improvements and so much more, but what is life without learning? With the right confidence and understanding a teacher can make his or her lesson plans full of technology in a fun way that provides multiple ways in which to engage a child in learning (C. Fama, personal communication, October 10, 2014). After all, not every child learns in the same way.

What Are The Challenges?

From the data I have collected there was a clear common theme in the challenges presented. Celeste brought up the points there is a lack of time to incorporate technology and to teach new technology, not to mention to learn about new technology. It was also brought to my attention that some schools may not have the funds to provide effective technology to all of its students. Crystal and Celeste both stressed that when technology is provided, there is not enough of it to always be affective. Crystal has about 23 students and in her classroom there are four computers and only one iPad.

In the same way, there is not enough teacher preparation being provided. Often times teachers are left on their own to discover how to work a product and mold it into a way they can then teach their students with (C. Nimmons, personal correspondence, October 6, 2014). Another point brought up that connects is that there is a lack of support. Crystal works at King Elementary and the technology guy for them serves four schools. She sees him at most, twice a month. This does not provide for immediate problems and leaves the teachers fumbling. Celeste shares technological help as well. The access to the technology support varies depending on the problem severity and how busy the support happens to be. The turnaround for minor problems is about a week and higher priority is the day of or the next day.

Additionally, another challenge is the fact that, “technology is not static and is rapidly changing. Keeping up with something that is evolving at such a rapid pace can be intimidating and make some teachers feel overwhelmed.” (N. Macdonald, personal communication, October 12, 2014). A way to combat this challenge however, is to look at the latest versions of technology and figure out whether it is being used for what it does for education or because it is the latest and greatest choice (N. Macdonald, personal communication, October 12, 2014). To continue with this thought process, a similar challenge is the fear that if we focus on technology too much, education gets lost. It must be remembered that we should be using technology as an aid for teaching varying learning styles.

Feelings on Technology

The last theme I discovered was mostly what each informant thought about the use of technology in the classroom and what it can do. A big point was that new technologies allow for more interaction and engagement in lessons. Teachers can now use SMART boards, share videos, create projects, and so much more. Crystal brought up a point as well that starting in Kindergarten students will be expected to know how to effectively use a computer on account of nationwide testing begins in this year.

Furthering this thought, we are in an era where the younger generations cannot feasibly get away with a lacking knowledge of even the basics of using technology for scholarly purposes. We can see this by the fact that schools are using websites like iLearn or Schoolloop to interact with the students. Through Schoolloop students and parents can see what is going on at

school, forums where classes and individual students can interact with each other, the class homework can be viewed, as well as his or her grade. Furthermore, students are going to need to know how to work a computer for their testing, seeing as the Common Core will be tested online through either Smarter Balanced or Partnership for Assessment of Readiness for College and Careers. (Stanberry, 2014) Everyone does almost everything on a computer today. Do students even handwritten essays anymore? Who knows. An idea mentioned by Celeste was that the students have opportunities for knowledge that they many not have had without the technology. How many times do any of us find ourselves researching an interesting topic just because we can? If the teacher's lecture left you wanting more, there is an entire world out there with electronic answers for you.

Significantly, Niel brought a point up that stood out to me the most. The use of technology makes life easier on the students. When it is incorporated into classrooms, the children can have their textbooks on an iPad, there goes the extra 35 pounds in the backpack. He informed me that the students who work with class given iPads almost never forget their books or notes, as they are all on the iPad or in their school given Google Drive account. Everything is automatically backed up and saved. As a result, there is a tiny bit less stress and pain. They cannot lose their important information,

Generally speaking, having technology in the classroom can make life easier for everybody involved. Through the use of websites such as Google Docs or apps such as the Cloud, teachers and students have the ability to save and share whatever they need to quite easily. Macdonald informed that teachers can save their lectures, notes, classroom happenings , and ideas. According to Macdonald, Students can recall this information and automatically return to it, all the while saving and calling up their own books and notes (Macdonald, 2014, personal interview). Additionally the use of technology improves fine motor skills, memory skills, and consequently, confidence.

To conclude, technology is a fascinating medium we have at our disposal. It should not be feared or neglected; it should be used to our best abilities. Manipulate it to do what you want. Technology is here to stay and if we do our best to prepare ourselves than our students will have as many opportunities for positive learning that we can provide. Remember, do not be afraid, call

upon those that you need to, acknowledge the obstacles, and give your students with the best education you have at your disposal.

Evidence Based Decision Making

When thinking of what I could possibly do as an action for this Capstone, I came up with quite a few options. However, through analyzing the interviews done with Crystal Nimmons, Celeste Fama, and Niel Macdonald, I narrowed my ideas for actions down to three option.

Identification of Action Options

The first action option that I came up with was to create a blog online. This blog would be available to teachers and students alike. In theory I would like to gather as many informative and educative options that are out there. I would make a post for each element, telling the reader what the resource is and how you could use it. There would be an option to leave comments, questions, or suggestions for what could be added. There are so many different types of technological learning opportunities that sometimes it can be hard to find them. My hope with this blog would be to make the process slightly easier. This way I would be able to add to the blog indefinitely.

The second option was to set up and information session for teachers in order to gain a better understanding of the technology they will be and can be using. For this I would need to get permission from the principal and the agreement of the teachers. I would also need to find a professional that would be able to teach the staff how to use the technology that they have picked out for the school. Preferably it would be a volunteer, but if not I would have to find a way to see if the school would be open to paying the tech informant. This does not affect the students directly but by osmosis they would learn. Meaning that the students directly would not be getting instructions from the professionals but from their teachers. After the information session each teacher would go back to their respective classrooms and be able to effectively use the knowledge they gained to create a smoother flowing classroom setting. If their teachers know the technology they are using inside and out, the students will have a better chance at a fun learning experience.

The third option was to introduce the use of EduCreations into the classroom. This is a very simple and cute website. The teachers and students would be able to create their own videos

through pictures, writing, or video. I believe it would be a fun, interactive, and informative way of learning. We could set the children up with a topic and have them draw pictures and record their own script. It could be used for projects, lessons, or nights where parents come to the school. I believe it would benefit teachers and students greatly.

Evaluation of the Action Options

In order to decide which option was the best course of action, a rubric with three criteria was created. The criteria were chosen to help evaluate each option better. The three criteria included time, impact, and possibility. Time includes how long it will take to create, prepare, and complete the action. The impact refers to how much it will affect the students' learning. Some actions may affect the teacher more directly than the students. Possibility means how likely it is to happen. Will it take too long to complete? If the action is on the low side of the spectrum it would take longer than three weeks to pull together. An action higher on the spectrum would be able to be complete within the three weeks. In the following table, the project action options are rated against the aforementioned criteria.

	EVALUATION CRITERIA 1: Time	EVALUATION CRITERIA 2: Impact	EVALUATION CRITERIA 3: Possible
ACTION OPTION 1: Create A Blog for Students and Teachers giving different educational options dealing with technology	Medium	High	High
ACTION OPTION 2: Create an Information session for the teachers for a better understanding	High	Medium	Low
ACTION OPTION 3: Incorporate Edu-Creations	Medium	Medium	High

The first option involves gathering multiple technological references. There are many apps for all ages, as well as YouTube channels that are educational. The same goes for technological options. Most of this option will be spent creating the blog, finding the content, and promoting the blog to teachers and students alike. This will take a fair bit of time, but ideally

will be helpful to anyone who is looking for educational avenues connected to technology. This project has the potential to reach a multitude of students in varying school districts, as well as teachers. This project is also an extremely possible one to fulfill. Most, if not all of the work will be done by me. As I stated previously, it will be time consuming but only on my part.

Through the use of the blog students have the potential to further their knowledge on a multitude of subjects. The blog would be a quick and easy place to go to find a wide variety of educational mediums. Students would be able find topics that hold their interest and perhaps further their knowledge on them through the links provided. Similarly if a student is learning a topic they do not quite understand, there is the potential for that topic to be in a video, app, or website on the blog. Students would be able to find or get ideas on where to find information that would help them understand what it is that is causing their confusion. Along the same lines, if a teacher needs a new way of explaining a certain topic, they can search that out on the blog and potentially find a new perspective on teaching or understanding a certain subject. This action could turn out to be a very nice shortcut to have; one place to go for a multitude of resources.

The second option, which if you recall was creating and technological information session for teachers and staff, would involve gathering the support and participation of multiple parties. These people would include a technology expert, the principal of a school, the teachers, and the staff of the school. The school would also have to know what technology they are using and would like to use. It would also take a fair bit of time to get the permission of the school, carve out a spot in the schedule of everyone, find a technology expert, and get the technology ready. This also includes the fact that it would have to be figured out if the technology expert would volunteer or want to be paid for his or her time, that would lead to another obstacle in getting the school to agree to that.

However, this would open the teacher up to a lot of other opportunities. When interviewing my informants a main point was that they did not have sufficient training for the technology they are using. A teacher needs to be confident with technology in order for his or her students to be confident with it. Furthering that idea, if a teacher fully understands what they are attempting to introduce to the classroom, there is more opportunity to make lesson plans interactive and engaging. It was always painful to watch the teacher fumble around for 10-20

minutes with the computer. With this action option everyone involved has the possibility to become much more comfortable with using different technologies in the classroom.

The third option involves intense involvement from the students more so than from the teachers. This action would take a moderate amount of time as the teacher would have to learn the program, teach it to the students, and allow them to create their videos. It would also directly impact the students as they would be working in a hands-on approach. This option gives the teacher the opportunity to sit back (depending on the grade level) and see how much their students have learned and how well they can learn on their own. The students would have the opportunity to make short videos about certain topics in their own voice and their own way. This option allows the students personality to shine through the learning and information.

Evaluation of Evidence

While evaluating the options of a blog, a teacher information session, and the incorporation of EduCreations, it is important to take into consideration not only the criteria from the rubric, but also the informants' responses. In the interviews Crystal and Celeste both stressed that being trained in the technology they were expected to use as well as having affective technology. Creating a blog accessible for students and teachers does not affect class time, but provides an outside source for knowledge. Teachers and students alike will be able to explore the blog and what the blog has to offer on their own time. One may be able to infer that there is a high impact for students with this option. Students will be able to directly look at the site for engaging and interesting avenues of learning with technology. Whether this be apps, YouTube videos, other websites, or anything similar.

While the second option addresses the teachers' need for training, it would be very time consuming. There are a lot of factors that would have to jigsaw together in order to work. While at this point in time, it would not be a feasible task to take on, it could very well be done at another date. The impact as it were, affects the students less than it does the teachers. The students will only be affected when the teachers go back to the classroom and use their new found knowledge to engage the class with the technology.

Option three is a very interactive option. This option would take a fair bit of time on all parties. The students would have to create and record their videos and the teacher would have to

teach them how to do this as well as being available to help. However as this option works directly with a technology that may be new to the students, it would be a very educational option. The teachers would have to carve out instructional time in order to teach the students how to use the EduCreations website. Along the same lines, time would need to be set aside for the students to create their projects.

Decision Making

After weighing the options and thinking critically about each option, it was decided that the creation of a blog would be the primary action. The blog would be on the website entitled Wordpress, the blog itself would be called “Break Down The Classroom Walls”. Educational technologies, applications, websites and videos would need to be researched, collected, and briefly explained. The easy access to a possible wide range of students and teachers made this action the most appealing.

Concessions. During the thought process for actions, it was originally thought that the information session for the teachers and possibly one for parents and students would be set forth. However, I conceded to the point that there was simply not enough time to set this up. Each option had strength, I believe the strength of the information session would be that the teachers would have a concrete idea of what they were supposed to be doing. Any questions on how to work and interact with different technology would be able to be answered straight away. The strength of the EduCreations option is that it is very much, a hands on experience for teacher and student. Both the teacher and the students would be able to become more comfortable working with technology in a quick and engaging way.

Limitations. It is understood that there is no guarantee that students or teachers will use the proffered blog. In a perfect world the target audience would appreciate and be excited about the blog being available. The assumption is that this blog could make life easier and slightly less stressful for the target audience.

Potential negative outcomes. A potential negative outcome is that the action falls through and does not get seen or used. I have come to realize that once I create the blog and add the information to it, I do not have control over whether or not my target audience views or uses

the blog. I am going to do everything I can to promote the blog through various social media websites as well letting my informants know of the existence of the blog.

Conclusions and related outcomes

I, as the researcher of this topic, would have greatly appreciated this resource when I was in grade school. When I was in elementary, middle, and high school, there was not another alternative available. If I did not understand a topic or subject I had to wait for the next class and hope the teacher went over the material. The content of the blog will allow for the possibility of the subjects being studied to be explained in a different way that the textbook or teacher explains it. The blog will also be beneficial to those students who are undoubtedly too shy, nervous, or introverted to ask questions in person. This can lead to students getting a better understanding of certain subjects at their own space. In any case, this blog could indefinitely update and live on as technology will keep evolving and creating new avenues.

Action Documentation and Reflection

Once the action was decided upon the first step was to gather the content the blog posts were going to be about. I knew of several and asked friends who are students and teachers if they knew of any educational online items as well. The second step was to chose the host site, Wordpress, create the blog, and make a welcoming post to let anyone looking know what they were to be looking at. The third step was to actually create the blog posts. I would chose one of the educational options and begin the post with 'Introducing:' and then whatever that post would be talking about. From there a brief summary of the channel, creators, and hosts were given. One this was sufficiently done the link or links to the content were posted for the viewer to click on. The last step was to advertise the blog to friends who are teachers or students still and have them look at the blog. One of the best aspects of this action is that it can continue on. I will always be able to find content for posts as well as people to use the blog.

As briefly mentioned I collected all the educational online source that I already knew about, after that I went to Facebook and asked my friends (many of whom are teachers and students) for any educational options they knew of. Once this was done I began to create the blog, entitled Break Down The Classroom Walls (BDTCW) on Wordpress. Each posts begins as

Introducing: and then whatever the post is about. From there I give a brief background on each educational opportunity before giving a link or multiple links to whatever it is.

When I first had the blog I attempted to create it on a different blogging site, but found that it did not work the way I wanted it too. This led me to creating BDTCW on Wordpress. Another modification is that when I found educational videos I wanted to actually put them on the blog. Upon gathering the videos and channels I realized that this task was too large and slightly too complicated for me to reasonably do.

At this point I have had a few people like and follow the blog. I have also had friends request the link to BDTCW. I have also sent the link to the teachers that I know and they found it to have potential to be very useful. A surprising factor was how many educational YouTube channels and websites there are that I have never heard of before. I was also surprised of how much I enjoyed researching and creating each blog post.

The important next steps are adding more posts of a wider variety and continuing to post educational videos, channels, apps, and websites. Another next step is continuing to put the blog out there for people to know of and see.

Critical Reflection

It was a slightly hard process recalling what I have learned from doing this Capstone. Before this point I had not stopped to think what I have gained from doing this project. I believe that I have learned what kind of technology I believe should be used in an educational setting. I have also cemented my opinions on the positivity of said technologies in a classroom or school setting. Furthermore, I have realized how interesting this topic is and could continue to be. What have I learned about teaching? I have learned that no matter what is introduced we are going to have to get used to it and implement it. After all at the end of the day, if it will make learning and understanding easier for our students, that is what matters. Also, it matters not what technology you are using but how you are using it. It is important to remember that technology should not be the focal point of a lesson, but as a tool in order to enhance what it is your wanted to teach. I have learned that when working towards change you do not have to take these grand steps that will blow every one's mind. Sometimes it is best to take baby steps towards change.

Synthesis and Integration

I believe that the Liberal Studies Mission Statement has impacted me in subtle ways. Each Liberal Studies class nudges us to think of ways to create a better and well-rounded classroom. It also gives us the opportunities to see and create classroom life first hand. That is incredibly important and something I will always be thankful for. I have learned things that I want to do and what I do not want to do in my own classroom. I am very proud that our school puts forth an emphasis on multiculturalism with classes such as Multicultural Children's Literature. That class greatly opened my eyes to the need of diversity in a classroom. Going into this major I had no idea that we would be taught about multiculturalism, the development of different ages of people, or things from a school perspective. That was not something I thought about. I knew what I wanted to do with my life and just let the school take me there. The Liberal Studies classes made me realize how many aspects are involved in being a teacher and that they are all important.

The next steps in becoming the professional that I am working towards are the following. Firstly, I would like to learn how to create lesson plans, this is an essential part that I do not feel as though I have a handle on. Secondly, I would like to know how to handle an entire class of five to six-year-olds on my own. That feels daunting, but necessary. The biggest step in becoming the professional that I envision myself as is graduating. So here is hoping the future is bright!

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