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Effective Technology Policies: How To Create And Implement An Effective Policy For Personal Devices In Secondary Schools

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EFFECTIVE TECHNOLOGY POLICIES:

HOW TO CREATE AND IMPLEMENT AN EFFECTIVE POLICY FOR PERSONAL DEVICES IN SECONDARY SCHOOLS

by

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Introduction

Research Question and Overview of Chapter

Pagers, cell phones, tablets, Fitbits, iWatches, laptops - the list of electronic devices is ever growing and changing. Since the 1980s, schools have been faced with the question of what to do about these new developments in their schools. Should these devices be banned, restricted, or required? No matter what the school's mission, resources, or view of technology, technology is here to stay and schools need to think carefully about what policies they will create for students' personal devices. Therefore, my project seeks to answer the question: *How do secondary schools create and implement an effective technology policy for personal devices in their schools?*

In this first chapter, I will start by providing personal anecdotes to give the reader an idea of the real life successes and struggles schools experience with the creation and subsequent implementation of their technology policies. These anecdotes will provide a segue into my rationale for exploring this topic and the development of my research. I will define the terms "effective" and "personal devices" as well as clarify what the project does and does not seek to claim. Finally, I will explain who the primary stakeholders are and why each of them will benefit from the research I have conducted and the conclusions I have made.

Anecdotes and Rationale of Research

School 1: Required use of personal devices

"Ivan, why do you have two cell phones out right now? We are in the middle of a biology lab and all the materials are on the table. You just need your iPad out to fill out the worksheet."

"Sorry, but I got a new phone - look! Sorry, I'll put it away." Ivan finishes his text and then puts the phone face up on the table in front of him.

Five minutes later...

"Ivan, why is your phone out again? And where is your iPad?"

"Oh, my iPad died, so I need to use my phone to take pictures of the assignment."

"Fine, but only to take pictures; then you need to put it away."

"Just let me text my mom quick. She's pregnant and I need to make sure she is ok."

Ivan continues to use his phone on and off throughout the hour and only completes two questions on the worksheet.

School 2: Restricted use of personal devices

"Ms. Doffing, may I take out my cell phone to look up a word for my vocabulary assignment?"

"Sure, Jacques, thanks for asking. Just make sure you put it away when you are done looking up the word."

"I will." Jacques follows through and puts the phone away when he is done looking up the word.

Same school, new student

"Caden, you know you are only allowed to use cellphones in class when you ask permission and when it is content related. Clash of Clans is not content related, so I am going to

have to take your phone. Your mom can come and pick it up from the office at the end of the day."

Caden turns in the phone, unhappy and protesting, but compliant. Ms. Doffing brings the phone to the front office after class and calls his mom, according to the school's cell phone policy. Caden gets his phone at the end of the day, and she never sees it in class again. Caden knows that the next time it happens, he will not be allowed to bring his phone into the school for three days. His parents are aware and are on board.

School 3: Banned use of personal devices

"Good morning everyone. Today we are going to discuss the novel *Shane*. Please take out your books and your question sheet from the reading last night."

The students comply and the class has a great discussion free of beeping, vibrating, and sneaking glances at their lap or pencil bag to read a text. No cell phones are seen, heard, or talked about because they are all checked in at the front desk waiting until the end of the day when the students can retrieve them.

Although the students' names have been changed to maintain anonymity, each of these scenarios depict real situations I have encountered at three different schools in which I have taught. The first was at a public high school, where I taught for three months as a guest teacher, in which each student was given an iPad for the year. The students and teachers relied heavily on the iPads, using it for nearly every assignment and assessment. The second scenario was at the public middle school where I completed my student teaching. Students were allowed to bring cellphones to class but were only allowed to use them for academic reasons and only with the teacher's permission. Each classroom had a bright orange paper that listed the policy and

discipline procedure for inappropriate cell phone use. There were also stop signs outside of each door that told students the classroom was "cell phone free." The third is the school where I currently teach, a 6-12 public charter school that bans students from keeping their personal devices with them at school. Students sign and turn in their electronic devices to the front desk at the beginning of the day and need to sign them out at the end of each day. During the past three years of my teaching at this school, I have never once seen, heard, or found a phone or other personal technology device in any of my classes.

Every school has a technology policy in their parent-student handbook, so why are the successes of the classroom policies between various schools so drastically different? Why is it that some schools can create an expectation and have staff, parents and students accept, even embrace the policy, and then follow through on the expectations, while other schools seem to struggle to get the administrators on the same page?

In the past three years, I have tutored, taught full-time, or taught as a guest teacher at eight different schools (public, private, and charter) and two different tutoring centers. I have been in classrooms and schools where it is very clear what the expectations and consequences are for inappropriate cell phone use. Being confident that the administration and supporting staff would follow through on the policies enabled me to focus on teaching in my classroom. I have also worked in schools where I received a different answer regarding the school's technology policy from each person I asked. Answers ranged from "I don't know what our policy is," or, "Oh, we are supposed to do 'X', but I think it's ridiculous, so I just do 'Y'. Once the doors are closed, it's all up to you, right?" I have heard different versions of the rules from staff, parents,

and teachers. Consequently, those classes tend to be more frustrating to teach due to constant correction, redirection, and uncertainty about what to do when an infringement occurs.

Inconsistent and ineffective technology policies are not in the best interest of students and teachers alike. Schools need to create well thought out policies which are: a) in accord with their mission statement, b) supportive of student learning, c) clearly known and accepted by staff, parents and students, and d) followed through consistently. Is this effective policy creation and implementation possible? Yes, it is. I have seen successfully implemented technology policies, and I would like to help coach schools in creating and implementing more effective policies for their schools.

Defining Terms and Goals of Project

There are two terms that I will use frequently throughout this research paper and project: "effective" and "personal devices." What I mean by an effective technology policy for personal devices is a policy that: a) fits the mission and vision of the school, b) supports student learning, c) is clear and known by all stakeholders (staff, parents, and students), d) is followed through consistently, and f) is followed by the vast majority (at least 90%) of the students and staff at the school the majority (at least 90%) of the time.

The goal for this project is not to determine which type of policy is best (banned, restricted, or required) or how teenagers should use technology in general. The goal is to provide tools, guidelines, data, and suggestions to help all schools determine, create, and implement the best policy for their particular school. Before describing the project, it is necessary to determine the stakeholders and the benefits they will receive from the information provided through the paper and project.

Stakeholders and Benefits of Project

The stakeholders who will benefit from this paper and project are administrators, teachers and other school staff members, parents, students, and me. Although this project focuses on secondary schools, the information presented and the research explored can help all schools, pre-kindergarten to higher education, in creating and implementing an effective technology policy for personal devices. The information presented in this project will directly benefit administrators, superintendents, and other educational policy makers because they will be able to use the information as a road map to guide the creation and implementation of their policies. This project will indirectly, but just as powerfully, benefits teachers, parents, and students. With a clear, effective, and well-implemented technology policy, there will be less confusion, frustration, and tension between these three parties. As for me personally, I am interested in being a principal or starting a school someday, so knowing how to create and implement policies (not only ones related to technology policies) will be crucial for my success in that role. No matter who the stakeholder, having clear policies, expectations, and consistent implementation will bring compliance and joy back to the classroom.

Summary

To summarize, the question I am exploring is: *How do secondary schools create and implement an effective technology policy for personal devices in their schools?* Relying on firsthand experience with both effective and ineffective policies, I will explore three types of technology policies for personal devices: 1) banned use, 2) restricted use, and 3) required use. Schools need to think through and be prepared for the realities of personal devices in their school before students enter the building. I will provide guidance and a framework for schools to create

and implement such policies. For any policy to be considered effective, it must fit the school's mission, have clear rules and consequences known to all stakeholders, have a chain of command for follow-through on infractions, and be followed by the majority (at least 90%) of the students and staff the majority (at least 90%) of the time.

This project is not meant to determine how schools should approach technology and personal devices but rather to help guide schools through the planning process to determine and create a policy which is effective for their particular school. School staff, parents, and students will benefit from the research provided in chapter two, the literature review, and the project itself, described in chapter three, which is a workshop for school administrators to create and update their technology policy. The final chapter is a reflection on the process of this research and project as well as suggestions for future edits, uses, and the need for further research and development.

CHAPTER TWO

Literature Review

Research Question and Overview of Chapter

Technology is ever growing, updating, changing. The devices are getting smaller, more subtle, and more present. Currently, the most prevalent personal electronic devices in the classroom are cell phones and tablets. The following literature review seeks to answer the question: *How do secondary schools create and implement an effective policy for personal devices in their schools?* The research lists the various policies currently in place throughout the United States of America, describes the history of technology in the classrooms, and explores the pros and cons of technology in schools. The research then delves into how schools decide, create, and implement policies, as well as discovers what makes a policy effective. Finally, the combined sources suggest what methods are required to create and implement an effective cell phone policy in a secondary education school setting. The research incorporates information gathered from parent/student handbooks; interviews with students, parents, teachers, staff, and administrators; previous studies and dissertations; and newspaper articles.

History of Personal Devices in Schools

Pagers

Personal electronic devices in schools is a relatively recent development. With only forty years between the invention of the pager to the iWatch, there has been substantial developments in these personal devices which makes it difficult for schools to stay ahead of the technology.

The presence of disruptive electronic devices started in the 1980s with the invention of the pager. Although there were other personal electronic devices, such as Walkmans for playing music, portable radios, and cameras, there were no small devices that allowed students to communicate with each other. According to an article entitled “The History of Pagers,” the first consumer pager was the Motorola’s Pageboy I in 1974, but they did not gain popularity with students until the early 1980’s (2004). By 1988, pagers were becoming more prevalent in schools, and the use was not always as innocent as wanting to meet up with a friend. In fact, many schools throughout the country began to ban pagers because it was discovered they were being used for drug dealing; a student would get an alert when the dealer was ready to meet. In 1988, the *New York Times* reported that more than 50 schools districts throughout the county prohibited pagers, or beepers, on school property due to its affiliation with drug dealing (Sims, 1988).

Not everyone was on board with these zero-tolerance policies, however. Some students reasoned, "It is a dangerous thing to start banning objects that are merely associated with criminals. Some prostitutes wear ankle bracelets. Does that mean schools should stop girls from wearing them? What comes next - the banning of certain types of clothing or hairstyles?" (Sims, 1988). Students were not the only ones to question the ban; the American Civil Liberties Union also opposed the complete restriction of pagers. Janlori Goldman, a lawyer for the union’s privacy and technology project stated"the school has the burden of proof to show that the beepers are disruptive and not being banned because they are linked with illegal drugs” (Sims, 1988). Some people thought pagers should be allowed in school in defense of students who had medical

reasons for them. Parents worried that they would not be able to reach their child in time if they had to call the school office first.

Despite the opposition, many districts maintained the ban, believing that it was in the best interest of the students, both socially (many students wore fake pagers to seem "cool") and legally (making it harder for students to deal drugs). Other schools allowed them for specific exceptions, like medical needs. In a rural school in Baltimore, students were allowed to wear pagers because they were volunteer student firefighters and needed to be easy to reach in the case of an emergency (Sims, 1988). Interestingly, these debates and reasons for and against banning pagers in schools are the same as the debates that surround banning cell phones and other personal electronic devices.

Cell Phones

Cellphones, in spite of their similarities to pagers, presented much more complex issues. Although the commercial cell phone was available starting in 1983 and the laptop computer in 1986, neither was small enough nor advanced enough to cause a viable threat to schools. Mobile phones were bulky and expensive; the same was true for laptops. It was not until the release of the first GSM (originally Groupe Speciale Mobile, now Global System for Mobile Communications) mobile phones in 1991 that the presence of cell phones in schools began to really spike, and with it new policies for their use. The number of cell phones in the United States grew from 1.5 million in 1988 to 13 million just five years later in 1993 (Farley, 2005). Once again schools banned mobile phones because of its association with drug dealing (Richtel, 2004). Similar to the pushback against the ban for pagers in the 1980s, parents, students, and

union members complained it was unnecessary and unfair to completely ban mobile phones because students might need them for medical or family emergencies.

Although some people reasoned that students could use a payphone to call parents in the case of an emergency, this could be unpredictable and more difficult to manage because a student might not have the money or the parent would have trouble calling their child back if they missed the call. When cell phones were just coming onto the scene in the 80s and 90s, students often used pay phones, but their number declined sharply in the mid 1990s. Today it is estimated that only about 500,000 pay phones remain in the country, a 76% drop from the 2.1 million pay phones that were placed around the country in 1999 (Hampel, 2011). Many students today have never used or even seen a pay phone, so parents continue to buy cell phones for their children in order to be in regular contact with their children.

By the early 2000s cell phones were rampant in schools, but now they could do more than just make a phone call; they could be used to take pictures, send emails and text messages, record videos, and access the internet. Today there are more cell phones than people in the United States and they are no longer the exclusive property of the wealthy (Farley, 2005). With lower usage rates and growing family plans, nearly every adult and teenager in the United States has at least one cell phone. According to a 2017 report from Nielsen's Mobile Insights Survey, 45% of 10 through 12-year-olds have a cell phone in the United States and around 16% of 8-year-old are given their first cell phone. Long gone are the days when teachers would cringe at a single beep of a pager. Today's teachers must now be aware of the vine-like earbuds that crawl up sweatshirt sleeves and into teen's ears, the beeps and dings of text messages, and the blinking

lights that indicate a student might be recording a person or event in the classroom while the teacher may be completely unaware.

Three Types of Technology Policies for Personal Devices

Through my research and my personal experience teaching in a variety of school settings, school technology policies for personal devices fall into one of three categories: schools that ban personal devices, schools that restrict the use of personal devices, and schools that require the use of personal devices. These three types of policies can exist within one country, state, and even districts. For example, in 2011 *The York Dispatch,* a local Virginia newspaper, printed a list of the cell phone policies within one district. The expectations ranged from total exclusion:

> Students are not to have cell phones in their possession during the school day, including lunchtime. Cell phones are not to be turned on, used or visible during the school day for any reason. Students who need to make calls of any type during school hours must use the discipline office phone.

to use during designated times or locations:

> Students may carry a phone during the day, but it must be turned off and out of sight upon entering the building, except during the student's scheduled lunch period. During the scheduled lunch period a student may use a cell phone in the cafeteria, main lobby or front steps only.

to a more open and differentiated approach:

> Cell phones are not to be used during instructional time; individual teachers and/or building committees can determine use of phones during non-instructional time.

Although this article focused on cell phone policies, these trends in policies can be found applying to all personal electronic devices. The following sections will provide examples of wording for each type of the three policies, reasons given for the policies, as well as benefits and struggles unique to each policy.

Banned Use of Personal Devices

Thomas MacLaren School in Colorado Springs, Colorado is an excellent example of an effective policy of banned use of personal devices. Not only does the school prohibit students' personal devices from being used during the school day, but it also encourages its staff and students to stray away from screen time whenever possible. Instead of watching videos, reading articles on a computer, playing learning games online, or allowing students to use the personal devices for non-academic purposes during breaks throughout the day, Thomas MacLaren School instead opts for reading from a physical book, acting out the scenes in a play, discussing face-to-face with other students, and playing interactive classroom games on the white boards. Thomas MacLaren School's policy simply states:

> Cell phone use is prohibited in the school building. If a student brings a cell phone, laptop, Mp3 player or any electronic device, it will remain at the front office until the end of the day ("Parent-Student Handbook 2017-2018," pp. 28).

If students brings a cell phone or other electronic device to school, they must sign them in and out each day at the front desk, where they are kept in grade-specific drawers. If a student needs to contact a parent, they need to use the school's office telephone; the same is expected of the parents who want to reach their child during school hours. The primary reason Thomas

MacLaren School created this policy was to maintain the MacLaren culture which aims to provide opportunities for students and staff to interact with each other and the text directly.

One of the primary benefits from banning personal devices has been mentioned already: it allows more direct interaction between students, teachers, and the text. This type of policy also greatly decreases the number of serious behavioral infractions including cyberbullying, cheating, and sexting that can occur during school hours. The distraction from the internet, games, and other electronic applications are eliminated in the classroom, which allows for more learning and less correction.

There are some challenges with banning personal devices, however. Depending on the size of the school, it might not be feasible or practical to have every student turn in his or her personal devices at the beginning of each day. Even in a small school like MacLaren, which currently has 470 students, there has been a theft of a cell phone that occurred when a students took someone else's phone from the drawer at the front desk at the end of the day. Another potential drawback to banning devices and avoiding technology in schools, according to some, is that this does students a disservice because they are not learning how to use technology appropriately or given tools to help them with technology in the future. Teachers at the school argue that technology is designed to be user-friendly and students will be able to learn what they need to on their own time, so it is not the school's job to teach this to them.

Schools considering this type of policy need to think carefully about the logistics of banning personal devices and have a clear idea of the benefits the school will experience without these personal devices. If this seems too difficult to maintain or not in line with the school's mission and view of technology, perhaps a restricted use policy is more appropriate.

Restricted Use of Personal Devices

The next and most common type of policy is the restricted use of personal devices. This covers many degrees of restriction. For some schools this means students can keep devices in their lockers but can only use them during lunch and before and after school, but never in the hallways, bathrooms, or classrooms. For other schools, this means students can bring their devices with them and can use them in the classroom but only with the teacher's permission and only for academic reasons. These are two of the variations that fall under this type of policy.

One example of a district that requires all of its schools to incorporate technology into the classroom to some degree is South Washington County in Minnesota. The *Technology Acceptable Use and Safety Policy* states "students, staff, and community members should have access to district communication systems, networks, and an array of emerging technology resources to enhance the educational process of teaching and learning through the delivery of curriculum" (2015, pp. 1). The explanation and expectations for schools in that district goes on to say:

> Electronic information research skills are now fundamental to preparation of citizens and future employees. Access to the school district technology resources enables users to explore thousands of libraries, databases, bulletin boards, and other resources while exchanging messages with people around the world. The school district expects that employees will blend thoughtful use of the school district technology resources throughout the curriculum and will provide guidance and instruction to students in their use. (2015, pp. 18-19)

Schools and their staff in this district are not expected to allow technology at every turn but to utilize it in a way that is conducive to learning and to educate the students on the appropriate uses of the technology. Each school within the district is allowed to make their own adjustments and specific technology policies, but all are expected to embrace and find ways to use technology effectively in the classroom.

Woodbury Middle School, one of the secondary schools in this district, has a highly restrictive policy for use of personal devices:

> Students may bring cell phones and other electronic devices to Woodbury Middle School at their own risk...All cell phones will be turned-off, placed on silent, or left in the students locker by 7:50 a.m. Students may use their cell phone during class only for educational purposes and/or with teacher permission to do so. Students may use their cell phone appropriately during passing time, their designated lunch hour and before and after school. (2018, pp. 1)

The policy goes on to list appropriate uses (listening to music during breaks) and locations (in lunchroom, before school, after school) as well as inappropriate uses (taking photos and videos without permission) and locations (in the bathroom or locker rooms). Each classroom has a no cell phone sign just inside the door along with a list of the consequences for infractions, the primary of which is having the student's phone taken away and given to the front desk to be picked up by a parent at the end of the day. This is one of the most restrictive policies in the district

The least restrictive policy in the district is the South Washington Alternative High School. Instead of stating that cell phones were prohibited in the classroom, like the other three

high schools in the district, the policy suggested “It is preferred that students not be in possession of smartphones or any other electronic devices during the school day unless they are used for class work” (2015, p. 2). In no other policies during this research was the term “preferred” used, but, instead, the expectations either “allowed” or “prohibited” cell phones.

One benefit of using personal devices in the classroom is the enormous amount of information that students can access instantly. If they need to look up a word, picture, article, or video at any time, they can do so much more quickly that using a physical dictionary, trying to imagine a setting in a story, or finding a physical book at the library to conduct research. Students can also record assignments and create presentations using technology which can help engage more kinesthetic and visual/spatial learners as well as allow them opportunities to learn how to use these tools for future academic or occupational situations.

The primary drawback for having a restricted use policy is lack of consistent follow through and monitoring appropriate use. How are teachers to know if students are not using their devices in the bathrooms? Are they supposed to monitor the bathrooms and locker rooms at all times to make sure no one disobeys the rules? What happens if a fight breaks out in the classroom and a student starts recording it on their phone (as has happened to me personally); should the teacher focus on the fight and hope the student does not send the video immediately to his or her friends or post it online, or should the teacher grab the phone and then try to break up the fight? Teachers have so many students and responsibilities already, they are going to miss some infractions no matter how vigilant they are.

The restricted use policy allows for flexibility and may be the perfect balance of access to information while maintaining control, but schools will need to be very clear about the

expectations, be vigilant in monitoring appropriate use, and be willing to follow through on the consequences for infractions. If this limited or inconsistent access does not seem to be enough for what the school hopes to accomplish, then require students to have their own personal devices might be the policy most fitting.

Required Use of Personal Devices

The final and least common, currently, policy is required use of personal devices. There are a growing number of schools which require, or highly recommend all students bring their own personal devices, most often a tablet of some sort, to school each day. These devices are either provided by the school, often due to a grant or because they are part of a pilot program for technology in the classroom, or the devices are expected to be provided by the families. Each have their own advantages and drawbacks.

In South Washington County, the same one that expects all schools in the district to use technology well while also allowing for schools to create their own policy, the district declares that:

> Each user is responsible for his/her use of technology, whether personal or district provided. It is a joint responsibility of district personnel and all users to become educated about the responsibilities and expectations of using technology. (2015, p. 1)

The technology policy goes on to say that although the "use of the school district system and access to use of the Internet is a privilege, not a right," they believe that, "electronic information research skills are now fundamental to preparation of citizens and future employees" (2015, p. 2). Of the four high schools in that district, one currently has a 1:1 technology program, iPads which the school provides for every student. Teachers are highly encouraged to use the iPads for

assignments, assessments, and access to textbooks. Many students do not carry about pencils and notebooks because nearly everything is done electronically.

There are many benefits to every student having a personal electronic device in school. First of all, it makes grading much easier for teachers. If teachers give an assessment or assignments with multiple choice answers, the program can calculate the score immediately, giving the student and the teacher the score without work on the teacher's part or waiting for feedback on the part of the student. The student can see their answers right away and make corrections. These devices also save hundreds, perhaps thousands of pieces of paper per year. Schools can get electronic books, paper can be typed, and pictures of projects can be taken all online and submitted to one place where the teacher does not risk losing them, and all disputes over whether or not the student turned in an assignment evaporate. The convenience of working technology is profound.

The key term here, though, is "working technology." As anyone who has relied on any electronic device knows, problems and unexpected errors occur quite frequently. In a school setting students might forget to charge their devices, so the devices die during class; the network might not be able to handle all of the devices working at one time, so it might overload and crash; the internet might go out; or each student's device might take varying amounts of time to turn on and load a given program, so the teacher giving directions has to repeat himself over and over as students try to catch up.

The other major challenge to requiring students to have personal devices is, like having restricted use, monitoring appropriate behavior and use. The challenge, though, is infinitely greater because it is impossible to monitor thirty students' screens and teach them material at the

same time. It takes seconds to take a picture, send a text, or make a comment on social media. Schools can deny access to different websites, but sometimes these blocks can be too restrictive and they block unexpected sites that teachers need the students to access.

Finally, if the families are expected to provide a device for their child, instead of the school providing them, there can be problems of compatibility with programs or the parents simply cannot afford it. Schools will need to have a plan to help families that cannot afford the devices themselves. Having a variety of personal devices can also present a challenge to the teacher, the students, and the technology support team because they all will need to know how to use the various devices and their features.

Schools considering this policy need to take the school and families' resources into account before making this the expectation. The school will also need to provide a clear, detailed, and thorough policy including rules of technology maintenance and a list of fees for breaking or losing the device.

Dangers with Students Using Personal Devices in Secondary Schools

Distractions

The most common argument against having personal devices in schools is they are distracting for students because they are being misused socially, academically, and even legally. While many advocates for welcoming technology policy argue that cell phones can and should be used for academic purposes, it seems to be more difficult to implement than to talk about it. Connie Fawcett, an Oklahoma high school teacher explains that "students persistently use them a great deal for personal interactions via social media when they should be paying attention to what is going on in class." Teacher Becky Dieffenbach agrees saying that a cell phone "just

becomes a source of distraction for some students, because no matter how many times you repeat the rule that they can only be on technology when the teacher says it's ok, they choose to ignore the rules and then the disciplinary actions have to be enforced" (Kiema, 2015).

Cheating

Cell phones are not only used for games and other entertainment purposes during the school day, but they can also be used for more a more serious infraction: cheating. In a 2009 survey, more than one third of teenage students admitted to having cheated on an assignment or test using a cell phone (Miners). They admitted to storing information, looking up answers, or texting friends for information during a test. Parents of teens had curious responses to their survey on cheating; more than 75% of parents believed that cheating happened at their child's school, but only 3% believed their own child used it to cheat. That suggests that the majority of students who have cheated using a cell phone have a parent who do not believe they would do such a thing. There is a gap between the desire for appropriate academic use and its reality. Although cheating has always happened in schools without or without cell phones, the fact remains that it is now easier to cheat and harder to track, so schools must provide ways of eliminating this possibility.

Cyberbullying

Similar to cheating, bullying will also be a problems schools face whether or not students have access to technology. However, with the anonymity of the internet, students can say crueler things more often without being caught. Students can also manipulate photographs and videos to add a new dimension to cyberbullying. Over the last decade the Cyberbullying Research Center has surveyed nearly 15,000 middle and high school students and concluded that about 25% of all

teens has reported to be being bullied online, and 16% have admitted to cyberbullying someone else (2015).

Sexting

Along with cyberbullying, some critics of the more accepting cell phone policy fear that allowing students to carry cell phones in schools will allow more opportunities for sexting. Many New York City school officials are taking steps and creating procedures to combat this possibility (Thompson, 2014). Because of the overwhelming number of students who have their own cell phones, it is no longer reasonable to assume that those with cell phones must be involved in illegal activities, but with the addition of cameras and video recorders on the devices, a new set of illegal activities now tempt the users.

Besides cheating and cyberbullying, cell phones can be used for sexting, which can lead to unintentional illegal activity. The Oxford Dictionary defines sexting as "sending someone sexually explicit photographs or messages via cell phone." In a 2008 survey by the popular teen magazine Cosmo Girl, 22% of teenage girls and 18% of teenage boys have reported sending semi-nude photographs electronically. This is dangerous because these photography can fall under child pornography which is banned by both state and federal laws. Teenagers can be prosecuted for sending or possessing such images. The severity of the charges vary from state to state.

Implementation

There are two main components to effective implementation: buy-in from all stakeholders and follow-through. The following section will explain the importance of each and how to successfully do both.

Creating Buy-in

Stakeholders need to not only understand the new policy, but they need to agree with it, or at least agree to comply despite reservations. In the case of a school technology policy, there are three groups of stakeholders: the staff, the parents, and the students. Each plays a different role with regards to the policy. Therefore the way to create buy-in for each is unique and should be dealt with separately.

From Staff Members. The staff are the lifeblood of the school and without their compliance, any policy the school tries to implement is doomed to fail. Lindsey Broder, an occupational coach, provides five key steps to creating employee buy-in for any new policy (2013). First, lay out the vision: Make sure the employees know exactly what is changing and the reasons behind it, showing them how the policy will benefit them and how success will be measured. In terms of a technology policy, explain to staff members how the policy will make their and the students' time in the classroom more conducive to learning. For example, by testing students with an online tool, the grading will be done for the teacher, and the teacher can immediately see the results, allowing him or her to give pointed and direct instruction to the students who need help.

Secondly, after laying out the vision, personalize the tasks: Give the staff members manageable tasks that fit their strengths as much as possible. For example, if the policy requires all students to turn in their personal devices to the front desk, the teacher's job is to take any device seen in class and bring it to the front desk. The teacher is able to do this, and then the next step passes to the front desk staff to call the parents to inform them of the infraction and consequence. Each of these tasks is in line with the person's general job description.

Thirdly, once the school year has started, the administrators need to make sure they follow up with their staff members to see how things are going. The administrators should find out what has been successful and most challenging about the enforcement of the policy, and then takes steps to adjust the policy as necessary.

As the administrator is following up with staff members, he or she should be sure to nip any resistance in the bud, the fourth step. Administrators should be aggressive in addressing staff members who resist the change, and they should do it early and clearly by explaining again the policy, the staff member's role, and the consequences the staff member faces if the policy is not followed.

Finally, administrators should be prepared to change the change. If the policy is not working, be open to making adjustments or starting completely over. Continuing to enforce a failing policy will not make the policy better, so administrators should be humble and willing to acknowledge when it is not working and be willing to update what needs to be updated.

In terms of teacher buy-in specifically, Courteney Singer, a journalist for PBS, synthesized successes with teacher buy-in from three different school-wide programs: Success For All (SFA), Comer, and Knowledge is Power Program (KIPP) (2005). SFA suggests that 80% of staff buy-in is needed for any given policy for it to be effective in the school. If less than 80% of staff members do not agree with the policy, it is likely to fall apart pretty quickly. If the teachers are not willing to follow and enforce the policy, why would the parents and students feel compelled to follow it? Singer also states that advance commitment is crucial, so that when situations get tough, teachers are less likely to back out because they have acknowledged and committed to following the policy earlier. The easiest way to gain that advanced commitment is

by having the staff members sign an employee handbook at the beginning of the year, which includes the technology policy and the staff member's role in complying. This way, if there is resistance, administrators can point to the signature and policy to demonstrate the acknowledge and commitment the staff member made. The final strategy administrators should use to increase staff buy-in is by allowing staff opportunities to voice their opinions. This can increase buy-in because the staff feel valued by having their voices heard. This does not need to be a large meeting for every single policy, but it can be something as easy as sending the handbook out at the end of the year requesting teacher feedback. Teachers and staff are the most crucial stakeholders needed to buy in to the policy; the second are the parents.

From Parents. Although parents are not in the classroom, their buy-in or lack of buy-in can greatly affect the success of a policy, at least for their own children. The following are suggestions on how to help create buy-in from parents for using technology in school, but many of these principles apply to schools with more restrictive policies as well. First, start early by introducing the topic or policy during Information Nights, for example, not the first day the students come home from school. The sooner the parents know the expectations, the more time they have to ask questions and be prepared to support the school in the policy. Second, the policy should be explained in such a way that it emphasizes skills, focusing on the areas and tools the students are receiving by using the technology (or not using the technology). Third, schools need to keep up regular communication. The communication should be brief and should tell parents when a change is coming, when the change has happened, and any necessary addition information about how the change is going. Schools should also send directions, guidelines, or any other information parents might need to ensure success and compliance from their child at

school. In general, parents want to support the school but are not always sure of the policy or how they can help their child follow it.

From Students. The third, and in some ways the most crucial stakeholders, are the students. As the students are children and not adults like teachers and parents, there are somewhat more stringent rules and more frequent and direct instruction than the other groups. Before exploring some tools for creating student buy-in, schools need to remember that the school, not the student or the parents, is in charge of the running of the school.

With that in mind, here are some guidelines for creating student buy-in. Explain the rules, reasons, system, and consequences early and clearly. Remind students of the expectations throughout the year. Give them a way to communicate questions, concerns, or exceptions. Give them some time to adjust and learn the new rules (two weeks, from my experience, is usually sufficient). Remind them when the grace period is over and that the rules and consequences are now fully in place. When things are going well, acknowledge and thank the students for their compliance, reminding them why it makes the school better.

Follow-through

Implementation Guide. Once the staff, parents, and students have bought into to the policy, the school needs to follow through with the expectations. The following is a guide to implementing an effective policy described in 2003 by Margret Amatayakul, a journalist for the American Health Information Management Association (AHIMA). Each guideline of hers is followed by an example of how it applies specifically to technology policies.

1. *There should be visible support for the policy.* In the case of schools, teachers and administrators should not use personal devices in class for academic purposes in order to set a precedent and example for the students.
2. *Core values should be identified.* It should be clear how the cell phone policy supports the values of the school. For example, if a goal is to increase face-to-face interactions in the classroom, then a complete ban would support that goal.
3. *All managers should be aware of their duties and responsibilities and how they relate to the policy.* Each teacher should know what the expectation is when he or she catches a student disobeying the rule (i.e. confiscating the phone, warning the student, etc.). The dean or counselor (or whoever else is second in the chain of command) should be prepared to support the teacher in the enforcement of the policy and know the necessary follow-up steps.
4. *Plain language should be used for policy implementation information.* Students, parents, teachers, and other staff members should all be able to read and understand the policy. There should be little to no room for manipulation or miscommunication. Start by stating your policy in one sentence. For example, "Personal electronic devices must remain in the off position and be out of sight during class unless the teacher explicitly requests that they be taken out for academic use."
5. *All employees should have a copy of the policy or know where to access it for review.* It should be easily found on your school website as well as posted in the

school. If personal devices are allowed in any capacity, there should be a clear, visible sign in each classroom stating the policy and consequences.

6. *Employees should sign off that they have received and reviewed the policy and agree to be bound by it.* Employees as well as the parents and students should sign the appropriate handbook at the beginning of the year. In the case of an infraction, a copy of the policy with the signatures can be produced.
7. *Policies and procedures should be posted onto the shared intranet or other information sharing mechanisms that are available.* See number 5 for additional comments and ideas.
8. *The policy should be communicated and promoted effectively and consistently.* Again, these expectations should be clearly stated at the beginning of the year. Do not simply hand students the handbook or policy and expect them to read it but have the teachers read, explain, and take questions from the students directly. Staff should immediately start enforcing the policy at the beginning of the year to train students, parents, and other staff members.
9. *The policy should be discussed at staff meetings, department meetings and other meetings as applicable.* It would be prudent to check in with staff members at least once in the middle of the year to see how everyone thinks the policy is going and make changes as necessary.
10. *The policy should be discussed with various committees as well as at the board as applicable (for example: health and safety committee, diversity and equity committee, personnel committee).* The front desk, discipline team and other

teachers are perhaps the most important groups to be present at such a discussion, since they are the ones confronting and enforcing the policy head-on every day.

11. *The organization should plan to evaluate and measure the policy every two years.* Keep track of data, so your decisions can be better informed. Think ahead when creating this policy and anticipate future problems, so that your policy does not need to drastically change each year. The more consistent a school can be within the year and year-to-year, the better than policy will take and be followed.

Chain of Command. Make sure your chain of command is set in place at the beginning of the year. Make sure each person knows his or her responsibility. Make sure you have enough people to successfully follow through on these responsibilities. You might need to ask other teachers or staff to help out and be part of the chain if you do not already have enough staff members. There should also be redundancy; there should not just be one person to deal with discipline issues. The following is an example of what the chain of command might look like for any of the three types of technology policies:

Scenario: Student takes out phone during class without permission and starts recording the teacher.

- 1st person: Teacher – The teacher requests the phone, but the student refuses to turn it over.
- 2nd person: Dean – The dean comes to class, takes student into hallway and requests the phone, but the student still refuses. The dean walks the student to the front office and calls the parents, but parents do not support school and say they are not going to tell their child to hand over the phone.

- 3rd person: Principal – The principal speaks to student, and if student still refuses, the principal suspends student as well as contacts the parent, showing them the policy and consequence listed in the parent-student handbook.

Rationale for Research

Learning about the history of personal electronic devices and the subsequent policies in schools provides insight into the potential debates among school policy makers for future devices as well. Although the technology will change, schools, parents, and students will still be faced with the decision of banning, restricting or requiring the new devices into the school, and knowing the past reactions and reasons will help prepare administrators when thinking through their own policies. Since my capstone project is a workshop for administrators looking to create or update their technology policy for personal devices, it was necessary to research all aspects related to the workshop including benefits, drawbacks, and dangers of the various policies, how to create buy-in from all stakeholders, and how to effectively implement the policy. Using the data, guidelines, and research provides me with a strong arsenal of information and suggestions to help administrators in their policy creation, specifically in the workshop.

Summary

To conclude, there are advocates on both sides of the personal devices debate in schools. Students, parents, teachers, staff, and administrators are split on whether to ban the devices completely, allow them to be used in allocated places and times, or welcome cell phones into the classroom with proper training and academic purpose. The most common reasons for allowing cell phones in secondary schools are to enable students to communicate with their parents more effectively, to prepare students to become digital citizens, and to teach students appropriate

academic technology behavior. Critics of the open cell phone policy argue that cell phones are an inherent distraction, despite the policies in place; can be too easily used in illegal activities; and take away the focus on academics, focusing instead on social relationships.

CHAPTER THREE

Project Description

Research Question and Overview of Chapter

This project seeks to answer the question: *How do secondary schools create and implement an effective technology policy for personal devices in their school?* Based on research conducted through literature review and personal experience working in a variety of school settings, I developed a clear and concise program for school administrators to update or create effective technology policies for their school.

Two terms, "effective" and "personal devices" need to be defined as to what they mean in this project. An "effective" technology policy for personal devices is one that: a) fits within the mission and vision of the school, b) supports student learning, c) is clear and known by all stakeholders (staff, parents, and students), d) is followed through consistently, and f) is followed by the vast majority (at least 90%) of the students and staff at the school the majority (at least 90%) of the time.

The goal for this project is not to determine which type of policy is best (banned, restricted, or required) or how teenagers should use technology in general. The goal is to provide tools, guidelines, data, and suggestions to help all schools determine, create, and implement the best policy for their particular school. Before describing the project, it is necessary to determine

the stakeholders and the benefits they will receive from the information provided through the paper and project.

The following chapter will provide the rationale and supporting details of the project: a three-hour workshop for school administrators looking to update or create effective technology policies for their school. First, I will present an overview of the project including the schedule and topics of the workshop. Second, I will describe the intended audience, setting, and timeline, and the rationale for each of them. Third, I will describe the frameworks and theories of learning used in the project, which includes Malcolm Knowles Adult Learning Theories. Finally, I will summarize the main points of the chapter and present a preview of Chapter Four.

Overview of Project

This project was a three hour workshop to help school administrators create or update their schools' technology policies for personal devices. There were four topics and three workshops given to the administrators from the same school to work together to create or update their school's policy for the upcoming year. The four topics discussed were: 1) benefits, drawbacks, and dangers, 2) suggested policies for banned use, restricted use, and required use, 3) how to create buy-in for staff, parents, and students, and 6) how to implement the policy. There were three workshops, each with their own goal: 1) review the current policy and reflect on its effectiveness in the past year, 2) answer key questions to prepare for the creation or update of the policy, and 3) create or update the technology policy for personal devices to be used in the following school year. The workshop ends with concluding thoughts and reminders as well as a question and answer time where attendees can share their own successes, and frustrations or ask follow-up questions about any of the topics or workshops covered.

The three main components of the workshop are: 1) presentations of the four topics, 2) three workshops, and 3) a packet of key information from the workshop to be handed out to attendees. I have several reasons for deciding to use a workshop as my platform for creating and sharing my project. Administrators are incredibly busy and, from my experience, often want to get things done as quickly and efficiently as possible. However, simply sending a letter, email, or packets with ideas about policies is not likely to get their attention long enough to read it and then act on it. Therefore, I wanted to make sure I shared this information in person. I also wanted to make sure that I provided enough time to the administrators to take a serious look at their schools' current policies, think about what goes on with personal technology in the classroom, and then have time to update or create a policy for next year. But time is not all that is needed to create these policies; the administrators also need some facts, guidelines, ideas, and suggestions to help them think through their policies. This is why I have included my presentations of various components that play a role in creating effective policies in general and specifically with regards to students' personal devices. I did the research and the work for them.

As for the packet that I gave them, I wanted to be sure that they could take the information with them. I am not giving them simply a packet of my slides, but condensed, single-paged (whenever possible) handouts that they can use as a quick reference for future policy meetings. I also emailed them the slides and handouts. I wanted to give them the details as clearly and concisely as possible.

Intended Audience

My intended audience was administrators or anyone else who plays a role in creating or implementing the technology policy his or her school. This would include primarily principals,

deans, and other administrative staff, but teachers, aides, and other staff members at the school would be welcomed as well, if their school's administration invited them. This workshop is not for parents or students. Principals and deans are intended to be the primary audience because they are the ones who create and update the handbooks and policies at their schools, and as the purpose of the workshop is to learn how to create and implement an effective policy, it would follow that people involved in this decision-making process be the primary audience. However, if the school's administration wanted to invite teachers and other staff members to come and give their input so they could be part of the conversation, they would be welcome. I did not invite them personally because I wanted to leave that up to the administration. Some administrators may not want other input and others might; I did not want to make that decision for them. For a similar reason, parents and students were not invited to this workshop because they are not the ones who create the policy.

Context

This workshop took place in a school classroom, where everyone was able to see the slides as well as face each other during the workshops. Since the attendees switched frequently between listening and looking at the presentations and then discussing their policies with their coworkers, they were seated in a way that both are easily done. The room had multiple outlets and extension cords, so that everyone could keep their laptops charged if needed.

Time-frame

This was designed to be a three hour workshop, but the mini-workshop itself took one hour and twenty minutes. It took place in April during state testing week, where the administrators tested students for the first half of the day and meetings for the second half.

I want to do this in one sitting to respect the time and energy of the attendees. Ideally, if the time is used well, they can get nearly everything in place for a new policy in three hours. All that would be left is to formally change the handbook and be ready to instruct the staff, parents, and students about the new policy at the beginning of the next school year. Because the mini-workshop took place later in the semester, it was too late for any changes to be made for the handbook next year. January or February would have been the best time for this workshop because that is the time administrators typically review their handbooks for the next year.

Adult Learning Theory

In preparing this workshop, I used some of the principles Malcolm Knowles, a professor of education and general consultant in adult education at Boston University School of Education, suggested applied to adult learning in order to the get the best results from the workshop of which the attendees were all adults. Knowles posits that adults learn differently from children and should be taught with specific principles in mind. Four of his principles are: 1) adults need to be involved in the planning and evaluation of their instruction, 2) experience (mistakes included) provide the basis for learning activities, 3) they are most interested in learning subjects that have immediate relevance and impact in their job or personal life, and 4) adult learning is problem-centered rather than content-oriented (Knowles, 1973). These principles seem especially relevant both for giving a framework for my workshop, and for explaining to the attendees when we talk about how to create buy-in for staff and parents. I shall address how these principles relate to both of these areas.

First I will explain how I used each of these principles in my workshop and why I thought they would make the experience more productive and enjoyable. The first principle

states that adults need to be involved in the planning and evaluation of their instruction. Knowles gives an example of this for teaching adults how to use computers. He explains that adults need to understand why a particular task is necessary, the reason for why it is being taught. In the case of creating a technology policy, the very first part of the workshop is explaining exactly that - the reason that an effective technology policy is necessary and why, although some of the administrators might already have one in place, it will be worthwhile to look at it again. If an adult does not see the value of the conversation or task at hand early on, it is likely their attention will wander and the time will be wasted. To prevent this from happening, I called upon my own experiences with various forms of technology policies in schools, examples that demonstrated a strong policy and some that were almost nightmarish to experience. Once, I had interest and investment in the topic, I proceeded with the workshop.

The second principle states that experience (mistakes included) provide the basis for learning activities. Experience of the policies and their effects will be included in two ways: in personal experience and in data. Each of the attendees came with some experience of the effectiveness of their current policy because it was the end of the school year and, since they were prepared with the suggested data, they were able to look at the number of violations and consequences from the past year. I, also provided data about inappropriate uses of personal electronic devices in schools and issues other schools have faced as well as successful policies. Throughout the workshops, attendees were instructed and encouraged to think critically their and others' experiences to help them create a better policy.

The third principle, that adults are most interested in learning subjects that have immediate relevance and impact in their job or personal life, and the fourth, that adult learning is

problem-centered rather than content-oriented, are perhaps the most clear in my project of all the principles. The entire workshop is directly relevant to the attendees' jobs and are problem-centered. Everything in the workshop and presentations are directly related to an important part of their jobs, policy making. All of it is also directly related to problem-solving, both by addressing and fixing past and current problems, but also by looking ahead and anticipating future problems.

Summary

To summarize, the plan and purpose of the project is as follows. The project is a three hour workshop designed to provide administrator and other school policy makers with relevant data, facts, and guidelines about personal electronic devices and related technology policies as well as allow them time to create or update their school's policy for the next school year with their fellow policy makers. The project is targeted to new schools that are looking to create a policy for the first time or schools that are looking to change their current policy. I incorporated professor Malcolm Knowles' four principles of adult learning into the structure of the project including allowing the attendees to plan and evaluate their school's policy using their past experience, providing them with relevant information that has direct implications for their individual school, and suggestions that are centered on problem-solving. The following chapter reflects on the project and research as a whole, suggesting some limitations and future adjustments as well as successes and discoveries throughout the capstone process.

CHAPTER FOUR

Reflection

Research Question and Overview of Chapter

Throughout the process of this capstone project, my research questioned developed and changed. It started out as: *How do schools create an effective cell phone policy in their school,* but by the end of the project, I discovered that my true question was: *How do secondary schools create and implement an effective technology policy for personal devices in their school?* In some ways my topic became broader and in other ways, it became narrower. I started this research in 2015, so cell phones were the primary personal electronic devices schools were exploring. One-to-one tablet use in schools was still a very new concept. In just three years, however, technology has continued to grow and expand exponentially. Now students have watches, phones, and tablets that all can access the internet. I wanted my project and research to be useful and relevant for several years, decades even, into the future, so I expanded my topic to be not simply cell phone policies but any sort of personal electronic device for students. Technology is going to keep changing, so focusing on one particular device, I thought, limited my project.

On the other hand, I made my topic more specific by focusing on secondary schools. I did not include elementary for a few reasons. First, I have little to no experience with elementary

school students and their school's technology policies. Second, at this point in the United States, it is rare for elementary students to have personal electronic devices in schools. And third, I preferred to go in depth with a smaller population, rather than cover more breadth. Similarly, I did not include data or suggestions for colleges' policies. Because students are adults, they have more choice over their devices, and the dynamic between the school and the students is quite different from secondary schools. Secondary schools are the ones in which I have the most experience, that have the highest need for an effective technology policy (currently), and had a great deal of data with which I could work.

In this final chapter, I will take a look back at my literature review and explain which sources and data were the most helpful for my final project and my understanding about this topic as a whole. Next, I will reflect on what I have learned through the process of this paper and project. Finally, I will look towards the future, offering suggestions for future research and describing limitations and changes I would make if I were to conduct the workshop again at a later date.

Reflection on the Literature Review

When reflecting on the research gathered in the literature review, I found the statistics and data about teenagers' misuse of pagers, cell phone, and internet access to be fascinating. I was especially surprised by the misconception parents had about their children using cell phones to cheat on assignments in class. According to the research, nearly 30% of parents have a child who has used his or her cell phone to cheat in school, but the parents are unaware or believe their child would not do that. In terms of which were the most applicable and useful articles that I found through my review of the literature, the practical guidelines of creating buy-in and

effectively implementing the policy were the most directly useful for my workshop. Since the purpose of the workshop was to help schools create and then implement their policy successfully, and the buy-in, follow-through, and support is where the policies are most likely to fall apart, I was highly encouraged by finding some clear rules and ideas that could make a real difference. I was also able to use those lists and ideas to check my current school to see how we are doing in those areas. I was happy to see that nearly every suggestion on the list for implementation was happening at my school, and my school's policy which bans personal devices is one of the most effective policies I have seen for personal devices in any school where I have worked. My peers, the deans and assistant head of school, said the same thing (unprompted by me) in their exit surveys as well as during their workshop conversations.

Personal Growth and Learning

As stated above, using the guidelines for implementation that I discovered and synthesized to determine my own school's effectiveness of the current technology policy for personal devices was encouraging. The workshop covered nearly every angle, question, and concern the deans at the school wanted and felt they needed to explore about the current policy. Although reading Knowles' theories of adult learning did not reveal or teach me anything new about teaching or presenting information to adults, it was a encouraging confirmation of all the strategies and methods I had discovered on my own by being a leader of many departments in my current position. As the Student Life Coordinator, I create events throughout the year for students and staff to participate in, and in doing so, I need to train the teachers in the rules, guidelines, and expectations of their role in the events. Over the years, I have learned that giving reasons for the expectations, assigning tasks in which the individual teacher is competent and

comfortable, and allowing for feedback from the teachers (all suggestions Knowles offers), have yielded in more consistent follow-through and enjoyable experiences for the students, staff, and myself.

Writing this paper, unlike creating the workshop, has been more of a challenge and learning curve for me. I am not used to writing professional yet personal papers, but rather, one or the other. Learning how to include my own voice and experiences while writing in a professional manner has required several conversations with my adviser and my reviewers. The separate sections and subheadings were helpful in creating a framework for the paper. I knew that the writing would be the most difficult part of the Capstone process for me because I tend to work in circles rather than a straight line, meaning that I do bits and pieces of various parts of the paper and project as they interest me and as I am motivated. Then I come back and fill in the pieces in more depth, making changes as I go. Although this does help me stay focused and motivated, it means that I often need to rewrite major parts of my paper as I learn and develop more accurate ideas and sentences. For example, my primary research question changed throughout the entire process as I was working to discover what exactly was at the heart of my research and curiosity.

Finally, as a student and learner, I have been pleasantly surprised at my growth from when I started the Capstone process over three years ago and when I finished the Capstone project itself this year. My thoughts are noticeably clearer and better organized; I know how to anticipate questions, concerns, and counterpoints people may have when reading the paper or attending the workshop. What has been frustrating is how much more stressed I have been during this final piece of my master's journey. Working 60 hours per week and trying to complete this

class has been overwhelming and has taken the joy out the project itself, which is disheartening because I care about doing this project justice. I want to be proud of my final product and be able to give this with confidence to an administrator who wants to develop a better technology policy. In some ways I have become a perfectionist and not having the time to uphold the standards I put on myself has frustrated me as a learner. This last point, lacking time, will be the first major limitation I will explore in the next section.

Limitations of Project and Suggested Revisions

The main limitation for my project was time. Having talked to the deans and principals at my school, they said that schools typically review their handbook and policies in February or March, so that is the time when I would want to set up this workshop in the future. Unfortunately, during that time this year, I was just starting to figure out exactly what my project was going to be. I ran the mini-workshop in April, which they said is a somewhat less busy time for administrators but is too late in the year to make changes for the handbook in the next year, at least for charter schools, because they need their policies to be approved by the Charter Institute. Another limitation was the lack of personal research. Since I signed up for the wrong class, I was unable to do all of the research I had originally planned which was very pointed and would have given me some great information about trends of behavior and beliefs of staff, parents, and students. I think my workshop would be more compelling and relevant if I could have shared my own personal findings along with the literature review that I did earlier.

Next Steps

I plan to share my findings at my school's morning assembly. Morning assembly is how my school starts the day every day of school. The entire school and staff meet together in the

auditorium in the morning for 15 minutes to hear a talk or performance by a teacher, student, or group of students. The only directions given are that the topic must be something that is good, true, or beautiful – the school's three primary values. I could give a quick presentation about either how to create and implement effective policies (which I think would be less interesting and relatable to students) or the data I discovered about the history and use of technology. I think it would be far too difficult to try to do both in fifteen minutes.

I also would be interested in conducting the full workshop at some point to schools in the future. I received helpful feedback from the deans and principals about the best way to get school administrators to read my emails and then peak their interest in the workshop.

There are personal benefits to this project as well as professional and school-wide benefits. Personally, I am interested in being a principal someday, and the creation and implementation of policies will be a regular part of my job, if I do gain that position. This entire process provided me with priceless experiences and information for guiding me in potential positions of policy making. Even if I do not become a principal or leader at a school or other institution, the information about creating and implementing policies is easily connected and transferred to teaching and setting up expectations in the classroom, so this knowledge and experience will not be discarded after this class is over.

Summary

Overall, this project and capstone process was a success. The research increased my understanding of the history, benefits, drawbacks, and dangers of personal devices in the classroom. The information about buy-in, implementation, and the examples of clear and successful policies provided relevant and practical suggestions and guidelines for administrators

attending the workshop and reading this paper. Using the information collected through the literature review, it was encouraging to compare and see that my current school has an effective policy and maintains best practices in creating buy-in and successfully implementing the policy.

There were also some struggles and limitations to the project and process. Writing in a professional yet personal manner was challenging at times, and working full-time while trying to complete this project was overwhelming. The primary limitation to the workshop itself was time; the workshop would be most applicable for schools to attend between January and March because that is when they review and update their policies. I also needed to condense the information in the workshop to 1.5 hours, half of the intended time, which forced the attendees to cut their conversations short and only partially update their policy. For future workshops, it is necessary to communicate the date, time, and purpose earlier and to more administrators, so they can be prepared to utilize the workshop fully. I hope to conduct the full workshop in the future or provide administrators with my findings so they can create or update their policies thoughtfully and effectively.

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